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EFFECTIVE INTERACTION BETWEEN OLDER AND YOUNGER PUPILS IN AN ELEMENTARY SCHOOL "PEACE CORPS" PROJECT. FINAL REPORT.

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THIS REPORT IS AN EVALUATION OF A PROGRAM WHICH PAIRED STUDENTS FROM TWO "SLOW" SECOND-GRADE CLASSES IN A HARLEM ELEMENTARY SCHOOL WITH STUDENTS IN TWO HIGH ACHIEVEMENT FIFTH-GRADE CLASSES. THESE PUPILS LUNCHED TOGETHER WEEKLY AND PLAYED TOGETHER AFTERWARD. ONCE A WEEK THEY MET FOR DIRECTED CLASSROOM ACTIVITIES. ALSO THEY WENT ON SCHOOL TRIPS TOGETHER, ATTENDED ONE ANOTHER'S SCHOOL ASSEMBLIES, AND WERE ENCOURAGED TO EXCHANGE GREETING CARDS AND OTHER TOKENS OF FRIENDSHIP. IT WAS HYPOTHESIZED THAT THE SECOND-GRADERS, HAVING THEIR NEED TO IDENTIFY WITH A SUCCESSFUL MODEL FULFILLED, WOULD SHOW AN INCREASE IN MOTIVATION, ACHIEVEMENT, PERSONAL AND SOCIAL ADJUSTMENT, AND POSITIVE SCHOOL BEHAVIOR AND RELATED ATTITUDES. EVALUATION PROCEEDED ON THE BASIS OF TEACHERS' RATINGS, INDIVIDUAL INTERVIEWS, SCHOOL ATTENDANCE, AND STANDARDIZED TESTS. TWO CONTROL GROUPS WERE ESTABLISHED FROM THE SECOND- AND FIFTH-GRADE CLASSES. THE RESULTS OF THE STUDY SHOWED THAT THE SECOND-GRADERS IMPROVED IN SCHOOL ATTENDANCE AND READING ACHIEVEMENT. HOWEVER, DATA RELEVANT TO SOCIAL AND PERSONAL ADJUSTMENT WERE NOT CONSISTENTLY SUPPORTIVE. MOREOVER, ALTHOUGH THE JUNE 1966 TEACHERS' RATINGS AND THE INDIVIDUAL INTERVIEWS INDICATED THAT THE PUPILS HAD GENERALLY IMPROVED SINCE SEPTEMBER, THE JANUARY 1967 TEACHERS' RATINGS OF THE PUPILS (THEN IN THIRD GRADE) WERE NEGATIVE, ESPECIALLY IN RELATION TO PEER GROUP AND CLASSROOM PARTICIPATION. POSSIBLY THE SOMEWHAT TUTORIAL RELATIONSHIP BETWEEN THE OLDER AND YOUNGER CHILDREN INHIBITED THE YOUNGER CHILDREN'S ABILITY TO PARTICIPATE IN PEER-GROUPS SITUATIONS. FURTHER CONTROLLED TESTING IN THIS AREA IS NEEDED. APPENDIXES INCLUDE A RESEARCH PAPER WHICH DISCUSSES THE PROGRAM IN TERMS OF THE PARTICIPATING FIFTH-GRADERS, AND OTHER RELEVANT DATA. (LB)

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Effective Interaction Between Older and Younger Pupils in an Elementary School "Peace Corps" Project

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City University of New York

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"Effective Interaction Between Older and Younger Pupils in an Elementary School 'Peace Corps' Project"

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The "Peace Corps" program was conceived by Mrs. Martha Froelich, Principal of P. S. 129, and her sustained interest and cooperation in this project has been invaluable. Her belief in the program and her desire for its evaluation, as well as such feelings on the part of her staff, expedited this research throughout the project. Mrs. Peggy Schwarz, co-principal investigator, was the faculty member who served as liaison with P. S. 129 throughout the life of the "Peace Corps" project. Mrs. Schwarz handled the multiplicity of administrative and educational problems involved in the day-to-day operation of the Peace Corps and in sustaining and encouraging the participation of the children and the teachers.

Dean Harold Abelson encouraged and provided support for the development of the project proposal and Dean Doyle Bortner generously committed College resources to the project once it was underway.

Several ORES staff members made major contributions to the project. Norman Shapiro was instrumental in the development of the proposal for the project. In the areas of data collection, data analysis, and reporting, Joan Freyberg and Norman Shapiro have assumed major responsibility and they also wrote the initial drafts of the Progress and Final Reports. Joan Freyberg, Sandra Epps, Marietta Shore, Anne Demby, and Ruth Wapnick conducted all the clinical interviewing of the children. Judith Guthwin worked on instrument development and, along with Norman Shapiro and Linda Curtis performed the statistical computations and data analysis. Sophie Colton, Rita Roth and Jeanette Lieburn have been of much help in completing the clerical and secretarial aspects of the Project.

We also want to thank the teachers who have cooperated with us in this undertaking: Joyce Landau, Miriam Fox, Ursula Larizza, Clementine Green, Margaret Spies, Joyce Vidal, Marie Vitacca, Marjorie Campbell, and Murray Schnitzer.

Finally we wish to acknowledge the quiet efficiency of The City College Research Foundation, and particularly Mrs. Helen Kreiger, for the dispatch with which all financial details of the Project were handled.

It is our hope that this pilot project sheds some light on the utilization of children's strengths and skills as part of educational programs for disadvantaged children.

David J. Fox

David J. Fox, Associate Professor
Director, Office of Research and
Evaluation Services
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INTRODUCTION

This is the final report of Project No. G-8091 entitled "Effective Interaction Between Older and Younger Pupils in an Elementary School 'Peace Corps' Project,"[1] funded from March 1, 1966 through January 31, 1967. This report will present an overall description of the program, its history, a detailed account of the activities and procedures it included, results obtained and discussion of results.

Overall Description of the Project

The Peace Corps project is a formal evaluation of a program in existence since September 1962 at Public School 129 in the West Harlem section of Upper Manhattan in New York City.

The Program was conceived by the Principal of the school, Mrs. Martha Froelich, and was based primarily upon her long-term observations of elementary school children and some of the dynamics of the interrelationships between the younger and older pupils in the school. The basic concept is simple--to provide early elementary school children with a relevant "success" model by pairing children in the two "slowest" second grade classes with individual members of the two most highly achieving classes of the fifth grade.

If Martin Deutsch and Kenneth Clark are correct, one of the persistent problems of underachieving children from disadvantaged areas is associated with low self-image, low motivation for academic success, and a feeling of alienation from the school and the "middle-class" achievement values it embodies. The thinking behind the Peace Corps was that in a close one-to-one friendship with an older child who was achieving and identifying with achievement values, a younger child might not only gain more self-esteem, but also might identify with his older buddy's values. The culture in which these children have been raised is a peer-oriented culture which places stress on having friends as a source of self-esteem and is also one in which older brothers and sisters frequently function as parent substitutes and ego ideals.

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[1] This project is familiarly known as the "Peace Corps" and in this report it will be referred to by this title.

The second grade was chosen as the focus for the Peace Corps because it was believed that this was the time in a child's school career that academic and other associated problems emerge and become identifiable. It is also at this time that standard achievement tests are given and the relative standing of the individuals is established. It was also felt that a low achieving second grader was young enough so that he could be worked with for a span of several years and, hopefully, helped to achieve greater motivation for school success before embarking on the specialization and intensification that takes place in Junior and Senior High School. The fifth grade was chosen for participation in the Program because it was the oldest group in the school which could continue in the Program for two consecutive years.

The Program itself consisted of pairing second graders with fifth graders and having them meet twice a week for lunch and another hour for an activity period. During these meetings there was both free and directed play, art work, and limited and spontaneous tutoring by the older child. There was also informal contact between the two members of the pairs, exchange of greeting cards, and invitations to each others' performances in the auditorium. The actual activities in which the children engaged were planned by Mrs. Peggy Schwarz, the liaison of The City College School of Education to P.S. 129, and staff members of the School of Education's

Office of Research and Evaluation Services.[1] The activities were guided and supervised by Mrs. Schwarz and the classroom teachers of the children and, from March through May, by a person employed specifically for this purpose, Mrs. Joyce Kagan, a former elementary school teacher. The evaluation of the Program was made through data obtained by staff members of the ORES in the areas of achievement, behavior, personal and social adjustment, attitude toward school, and motivation for achievement. Comparison data from non-Peace Corps control groups were also obtained.

Informal evaluations of the Program during the years from 1962 to 1965 by the teachers and other personnel at P.S. 129, as well as the City College staff members, encouraged the continuation of the Project each new academic year. One of the strongest reasons for continuing the Program from 1962 to 1965 was the extremely favorable reactions of the children themselves. Informally, both the younger and older members said that Peace Corps was a good thing and had helped them.

The College's decision to participate in seeking funds for a formal and objective evaluation of the Project was its interest in research into the factors involved in the development of educational handicaps among disadvantaged children and into the dynamics of the interrelations between younger and older preadolescent children. Neither of these areas has received sufficient attention in the research literature of education and/or psychology. In addition, it was felt the Brogram, if successful, had genuine potential as a realistic way to prevent large numbers of children from falling into the ranks of the educationally handicapped. It was felt to be realistic since implementing it widely would require no large financial outlay and no masses of specially trained professional personnel.

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[1] This office will hereafter be referred to as the ORES.

Furthermore, the Program was building upon the strengths of the children themselves, which we believe is, at present, a largely unused asset. In addition to desiring to increase understanding of the factors involved in the development of and the solution of the educational problems of disadvantaged children, we expected the formal evaluation to generate new hypotheses for study in this increasingly important and timely area of research. Hopefully it will serve to stimulate further research into the important components of school success and the development of similar programs on a larger scale in this and other urban schools.

THE PEACE CORPS PROGRAM

The Peace Corps Program must be seen in two phases, prior to 1965-66 when the formal evaluation began, and since that point.

The Peace Corps Prior to 1965-66

In 1962 Mrs. Martha Froelich, the Principal of P.S. 129,[1] conceived the idea for the Peace Corps Program. The details of the Program were developed in conjunction with Mr. Seymour Fliegel, a sixth grade teacher in the school. Mrs. Froelich's idea was to pair a younger child, who was beginning to experience academic failure and seemed to lack motivation for school success, with an older and better-achieving youngster. This concept was based on the Principal's observation that younger children do look up to older children, often identify with them and their values, and derive self-esteem from any association or friendship with an older and more successful child. She had observed that having a friend seemed to be extremely important to many children from disadvantaged neighborhoods, perhaps because of the incidence of family disorganization in low socio-economic groups. She also observed that older children served as models of behavior, values, and attitudes for younger ones, perhaps because children from these areas are often cared for by older brothers and sisters who act as parent substitutes.

On the basis of these observations, in the Fall of 1962, Mrs. Froelich decided to try to help three second graders who were having particular difficulty with their work by providing each with a buddy in the sixth grade Intellectually Gifted Class (I. G. C.). There was little structure to the Program, and the children met informally for lunch and outdoor playground activities a few times a week. The reactions of the six children involved were very favorable and it was the opinion of Mrs. Froelich and the teachers concerned that it had been helpful to both sets of children.

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[1] P.S. 129, as part of the Campus School Program instituted by the Board of Education to foster close cooperation between Colleges or Universities and public schools near their campuses, is affiliated with The City College.

Because of this initially favorable response, it was decided the following year to expand the Program, but to use members of the fifth grade I. G. C. class so that the Program could continue for two years with the relationships kept intact. These fifth graders were thus individually paired with members of the "slowest" (on the basis of reading scores and teachers' judgments) second grade class.

During 1963-1964 the children met about three times a week for lunch and also attended each others' dramatic performances. The structure of the Program was informal, although there was some direction and supervision of the activities and relationships of the children. Mrs. Peggy Schwarz,[1] Mr. Seymour Fliegel, and the classroom teachers themselves had lunch with the Peace Corps classes from time to time and thereby informally observed them. They also talked to the children individually and in groups from time to time to maintain a high level of interest in the Program and periodically suggested activities to the children, such as sending each other greeting cards and attending performances together in the auditorium.

The older children kept logs about their Peace Corps activities and also wrote evaluations of the Program at the end of the year. The second graders were verbally questioned about their reactions to the Program and their responses were tape-recorded by Mrs. Schwarz. The children's reactions to Peace Corps were highly favorable. The younger ones wanted to continue in the Program and said that their older friends had helped them.

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[1] Throughout the history of the Peace Corps, including this period of formal evaluation, the time devoted by Mrs. Schwarz has been part of the College's contribution to the Project.

With perhaps only one or two exceptions, the older children were also enthusiastic, said they had learned something from the relationship with the younger child, and seemed to grow in responsibility and self-esteem.

The following year (1964-1965) the same children, now in third and sixth grades, remained in the Peace Corps and another group of second graders in the "slowest" class were paired with the new fifth grade I. G. C. class. The children met about three times a week in the same fashion as the previous year. In 1964-65, although it was generally believed that because of internal difficulties the Program did not work as smoothly as it had the previous years, the children, in their logs, tapes, and evaluations again responded favorably and desired to continue in the Program.

At this juncture, Mrs. Froelich and Mrs. Schwarz felt that an objective evaluation of the Program would serve as a valuable contribution to the field of educational psychology and that, if the results of the evaluation were positive, extension of the Program in P.S. 129, and to other schools in New York City and in other urban areas would be made possible. All those who observed the Program and were acquainted with its workings had expressed their belief that it was a rich opportunity to help the educationally handicapped child and at the same time to study in depth the factors involved in academic failure and possible solutions to this problem.

It was also felt that the more formal structure for the Program which would be necessitated in an objective evaluation and the close relationship between the school and the City College would motivate the teachers and keep their interest and cooperation at a sustained and consistent high level. Therefore, during the Summer of 1965 a formal research proposal for the Peace Corps Project was drawn up by The City College Office of Research and Evaluation Services and submitted on July 30, 1965 to the U.S. Commissioner of Education for approval.

The Peace Corps 1965-66

Although approval of funds from the U.S. Office of Education was not obtained until January 1966, details of the Program were worked out and the program begun in September 1965. The City College supported these initial activities in the hope that the Project would be funded. Children from two fifth grade classes and two second grade classes were paired in late September. One fifth grade class consisted of intellectually gifted children and the other of children of "average" intelligence. These fifth graders were paired with children in the two slowest second grade classes. A third second grade class (Class 2-3) was selected as the control group because it was most nearly like the Peace Corps classes in achievement. The three second grade classes were considered by school staff to be relatively comparable.[1] A third fifth grade class (Class 5-3) was selected for comparison purposes because it was similar to the "average" class in the Peace Corps in the hope that one of our graduate students might wish to study the fifth graders as part of this Project.[2]

The fact that the I. G. C. program at P.S. 129 is considered an outstanding one and attracts children from all over New York City provided an important variable in this study. It meant that, for the most part, these I. G. C. children came from more advantaged socio-economic backgrounds. The second fifth grade class was used in order to try to evaluate the influence of this factor.

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[1] The Metropolitan Achievement Test administered in the Spring of 1965 was used as the basis for class placement in 1965-66. The designations here of relative class performance were based on observation of test scores by school staff and not on tests of statistical significance.

[2] The data available on fifth graders were made available to, and analyzed by Joan Freyberg, staff member of the ORES who is a student in the Masters program at City College. Her report, prepared for our course "Seminar in Educational Research" is appended to this report.

It was decided to pair the children in the fifth grade intellectually gifted class (I. G. C.) Class 5-6, with the "slowest" second grade class, Class 2-1, and the "average" fifth grade class, Class 5-5, with Class 2-2 whose achievement scores had been slightly higher than those of Class 2-1.

The actual pairing of the children was done by the classroom teachers. Mrs. Ursula Larizza (Class 5-6) and Mrs. Joyce Landau (2-1) met together, as did Mrs. Sandra Blum (5-5) and Mrs. Miriam Fox (2-2). After they had some opportunity to get to know the children they began the pairing. The most important requirement was that the sex of the two members of each pair was the same. This requirement was met in all but a very few cases. Despite the fact that a few older children were given more than one buddy to avoid pairing different sexes, it was in fact necessary to have a few mixed pairs because of the disparity in the numbers of each sex in the classes involved. While the teachers were not fully acquainted with the children at the time of the pairing, they did attempt to consider personality factors in making the pairings. For example, if a younger child had already been observed to be rather aggressive, every effort was made to find an older child capable of dealing with the aggression without fear and also without the need to retaliate. Despite the lack of intimate knowledge of the pupils, the teachers apparently did a good job of pairing the children because, with very few exceptions, the children have repeatedly expressed their affection and liking for their buddy.

The Peace Corps activities per se, got into operation by the end of September. Mrs. Froelich, the Principal of the school, Mrs. Schwarz, the College coordinator, and the teachers themselves gave the youngsters a general orientation to the Peace Corps. The fifth graders were told they would be part of a City College program and that they, like members of the United States Peace Corps, would be helping those less fortunate than themselves and that this would in return help them and teach them about life. The activities of the United States Peace Corps were discussed at length by the fifth grade students.

The members of the I. G. C. class, mainly from more advantaged homes than the other pupils of the school, were told they would have the opportunity to help children who did not have all the advantages at home that they had. They were also told that their second grade buddies were not doing well in their work and perhaps because they themselves were doing so well, they could assist the younger ones in some of their work. They were not encouraged to do direct tutoring but rather the friendship aspects of the relationship were stressed, as well as the fact that this would be an opportunity for the older child to learn about younger children in the event he ever considered an occupation that involved work with children. Class 5-5 (the non-I. G. C. class) was told the same things, except that the socio-economic differences were not mentioned because the children in this class were similar to the younger children in this respect. Any child who was doubtful about the Program or had any questions was encouraged to discuss the situation with Mrs. Schwarz and in fact Mrs. Schwarz did talk over problems and help find solutions for the approximately half a dozen children who approached her about individual relationships.

The second grade children were oriented to the Program by telling them they would have an older friend in the fifth grade with whom they would have lunch and do other activities and that the friend would help them in any way he could with school work or any other problems. They were told they would have fun together and go on trips.

From that time on, the pairs of children had lunch together twice a week in a separate part of the lunch room (two classes on Monday and Thursday and the other two classes on Wednesday and Friday). The children were allowed into the lunchroom before the other children in the school and therefore did not have to wait on line for lengthy periods as they would have had to do otherwise. During the lunch period they were free to talk and exchange sandwiches and, upon occasion, would exchange small gifts or greeting cards. Weather permitting, they would go out to the playground to play games after lunch. At first, they mingled freely with non-Peace Corps groups, but it was felt that this would dilute the effect of the relationship, since often one of the second graders would see a neighborhood friend (not in Peace Corps) and go off with him or her. It was therefore decided to escort the children to a separate park and playground away from the school. This was continued until conflicts developed with older boys also using the playground. Thereafter, outdoor Peace Corps activities were held in a section of the yard of P.S. 129 reserved for them.

Prior to funding of the Project, the lunch and play activities of the children were informally supervised by the teachers and Mrs. Schwarz. The activity was not directed and the supervision actually consisted of maintaining order and settling disputes. When the weather was inclement, the children usually went to the auditorium and played learning games (the Dolch reading games, for example) or read together. Once the Project was funded, a licensed elementary school teacher was added to the Project staff (Mrs. Joyce Kagan), as were two of the teachers in P.S. 129, who agreed to devote their free time to provide closer supervision of the lunch periods and the after-lunch play activities.

In addition to supervising free activity more closely, Mrs. Kagan and the teachers made suggestions to the children for indoor activity, such as making drawings of their buddy and, making greeting cards and other artistic projects. New learning games were also introduced. They also escorted the children on a trip to the Central Park Zoo and the Children's Zoo, following which they encouraged the children to write compositions together about their reactions to the trip.

Besides meeting twice a week for lunch, the Peace Corps buddies met for an additional hour a week, one pair of classes on Monday afternoon and the other pair on Thursday afternoon, for directed classroom activities. This time was allotted from a regular Physical Education period. During this hour, the children sometimes played learning games, sometimes read together, made puppets, costumes, piggy banks, and other crafts activities, as well as making greeting cards for each other and for members of their family, making "free" drawings or drawings of themselves, their family, or their buddies, and writing compositions together, some of them in regard to their feelings and reactions to Peace Corps.

The Peace Corps buddies also were invited to attend each others' assembly programs and performances and also, under the direction of a volunteer dramatics teacher (not on the staff of P.S. 129), gave a joint dramatic production for which the buddies made costumes and rehearsed together. The second graders performed as members of a chorus in the production and sang a number of well-rehearsed songs.

Some of the buddies also saw each other at home and there was occasional informal contact about the school premises by the new friends. There seemed to be the feeling that "somewhere here in this school is someone who is my friend" and, as one child volunteered to one of the staff members, "Now I don't feel like just nobody on the street." Christmas, Easter, and birthday cards were exchanged between the buddies and frequently drawings and other artistic productions were made for one another. Sometimes gifts and small favors were brought from home for the buddy and parts of lunches were often shared.

The teachers of the Peace Corps classes made attempts to weave the

Peace Corps activities and ideas into the mainstream of the class work. English compositions and other appropriate areas were related to Peace Corps. An example of this was a year-end project undertaken by Mrs. Larizzo's class (5-6) at her suggestion. The students composed stories specifically intended for their Peace Corps friends and they designed imaginative and colorful covers for the stories and then presented them to the younger buddies.

One additional activity of the year involved only the fifth graders. They were taken (Classes 5-6 a nd 5-5) on a tour to City College and through Cohen Library and were invited to see a film on children's books. This activity contributed strongly to a feeling on the part of the fifth grade Peace Corps children that they were an important part of City College.

Procedure

Hypotheses

Because some of the data from the evaluational instruments used in the Project did not yield data considered suitable for analysis and because additional instruments not originally contemplated were prepared and used, the hypotheses of the study, while remaining essentially the same as those stated in the initial Proposal, had to be revised. The actual hypotheses tested were:

1. Peace Corps children will exhibit better personal adjustment than non-Peace Corps children as measured by relevant aspects of data obtained from:

   (a) the California Test of Personality,
   (b) teachers' ratings of specific behavioral traits,
   (c) children's responses in individual interviews,
   (d) judgments of the interviewers.

2. Peace Corps children will exhibit greater social adjustment than non-Peace Corps children as measured by relevant aspects of data obtained from:

(a) the California Test of Personality,

(b) teachers' ratings of specific behavioral traits,

(c) children's responses in individual interviews,

(d) judgments of the interviewers.

3. Peace Corps children will have a more favorable attitude toward school as indicated by relevant aspects of data obtained from:

(a) school attendance,

(b) teachers' ratings of specific behavioral traits,

(c) children's responses in individual interviews,

(d) judgments of the interviewers.

4. Peace Corps children will exhibit higher academic achievement than non-Peace Corps children as measured by:

(a) the Metropolitan Achievement Test in Reading,

(b) the New York Growth in Reading Test,

(c) New York State Pupil Evaluation Test (arithmetic subtest),

(d) teachers' ratings of achievement.

Sample

The final sample for this Project consisted of fifty-nine second grade children attending a public elementary school in a lower socio-economic and predominantly Negro and Puerto Rican area of Manhattan. The subjects were in the three "slowest" classes of the second grade, eight boys and eight girls in Class 2-1, thirteen boys and nine girls in Class 2-2, and fourteen boys and seven girls in Class 2-3. The children in two of the classes, 2-1 and 2-2, were paired with buddies in two achieving fifth grade classes and participated with them in the school's Peace Corps program consistently from September 1965 to June 1966. The children in the third class, 2-3, did not so participate and served as the control group. An additional thirty children (eighteen in Class 2-1, four in Class 2-2, and eight in Class 2-3) were eliminated from the final sample because they were not in one class for the full academic year because of school or class transfer.

Definitions

In the Results and Discussion sections of this report Peace Corps Class 2-1 will be referred to as PC-1, Peace Corps Class 2-2 as PC-2, and Class 2-3, the control, as NPC (Non-Peace Corps).

In Table 1 of this report and in appended Freyberg report, the term Junior Peace Corpsmen (JPC) will refer to the younger children in the Peace Corps program (Classes 2-1 and 2-2) and Junior Control Groups (JCG) will refer to the children who were in class 2-3. The term Senior Peace Corpsmen (SPC) will refer to the older children from the two fifth grade classes who participated in the Peace Corps program, and Senior Control Groups (SCG) will refer to the older children from Class 5-3 who served as the control group.

Quantitative Measures

Ten specific procedures were utilized in order to assess the effectiveness of the Peace Corps program in three main areas: 1) achievement,

2) personal and social adjustment, and 3) school behavior and attitudes. The instruments used, to whom and by whom given, and the date of administration are summarized in Table 1.

Rather than repeat the material summarized in the Table, at this point we shall add only a few additional comments about the evaluation procedures. The achievement data for the older children (Senior Peace Corpsmen and fifth grade control group), the teacher ratings of these children, and the individual interviews with these children were obtained in the event that comparisons between fifth grade Peace Corpsmen and the non-Peace Corps fifth graders proved to be feasible, even though such comparisons were not stated in the Project description. As noted earlier, these comparisons were made in the study carried out by a graduate student on the ORES staff, as part of a course requirement, and a report of this study is included as Appendix A to this report.

It should also be noted that, while the California Test of Personality was administered as the group test it is intended to be, certain measures were taken to insure that each child understood the intent of each question. One ORES staff member read each question in the test booklet aloud twice (and more if necessary) and explained words the children asked about. Three other ORES staff members circulated around the room to determine that the children had answered all questions and to further explain any question to a child who had hesitated in answering it.[1]

The twenty-five-item self-concept scale listed behavioral characteristics and for each item the child was asked if the characteristic applied

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[1] The four staff members who participated in this testing procedure were Miss Sandra Epps, Mrs. Joan Freyberg, Mr. Norman Shapiro, and Mrs. Marietta Shore.

Table 1

Description of Instruments Administered

Area	Instrument Used	Type of Instrument	Given by Whom	Given to Whom	Date
Achievement	Metropolitan Achievement Test in Reading	Group achievement test of reading and word knowledge scored in terms of grade level	The school itself, as part of citywide testing program	JPC and JCG	October 1965 and October 1966
	New York Test of Growth in Reading	Group achievement test in reading scored in terms of grade level	The school itself, as part of citywide testing program	JPC and JCG	May 1965 and May 1966
	New York State Pupil Evaluation Test	Group achievement test in arithmetic yielding only raw scores	The school itself, as part of statewide testing program	JPC and JCG	October 1966
	Iowa Test of Basic Skills	Group achievement test yielding grade level scores in reading and arithmetic	The school itself, as part of citywide testing program	SPC and SCG	April 1965 and April 1966
Personal and Social Adjustment	California Test of Personality	Group short answer test yielding overall scores for Personal and Social Adjustment	ORES staff members	JPC and JCG	October 1965 and June 1966
	Self-concept Rating Scale	25-item behavioral self-rating checklist	ORES staff members assisted each child in rating himself	JPC, JCG, SPC and SCG	May 1966 and June 1966
	TAT-type pictures	Drawings of two children at lunch with request to subject to make story about them	ORES staff members working with individual children	JPC	June 1966

(Continued on next page)

(Table 1 continued)

Area	Instrument Used	Type of Instrument	Given by Whom	Given to Whom	Date
Personal and Social Adjustment (cont'd)	Self-concept Interview	Individual interview with basic guideline of questions to assess various aspects of self-concept	3 ORES staff members	JPC, JCG, SPC and SCG	May 1966 and June 1966
			3 clinical psychologists	4 3rd grade classes in which JPC were placed in 1966-67	January 1967
School Behavior and Attitudes	Teacher Rating Scales	1. Ten characteristics to be rated on a 5-point scale	Constructed by and explained to teachers by ORES staff	Teachers of JPC, JCG, SPC and SCG	June 1966
		2. Thirty-four-item checklist to be rated on 7-point scale		Teachers of 4 3rd grade classes in which JPC were placed in 1966-67	December 1966
	Attendance Figures	Number of absences of each child 1965-66 and 1964-65.	Obtained from school record cards by ORES staff members		Obtained in January 1967

to him "most of the time," "some of the time," or "hardly ever."[1] The self-concept scale was administered during the individual interview of each child conducted in the Spring of 1966.[2] The lists of questions asked each child by ORES staff members in the two sets of individual interviews are included in Appendix C.

The Thematic Apperception-type test involved a drawing of two children at lunch in a school setting.[3] It was intended that one child be seen as older and the drawing would suggest the Peace Corps situation. One form of the drawing depicted boys and the other depicted girls. The children were told that this was a picture of two boys (or two girls) in the Peace Corps and were asked to make up a story about them. Responses were recorded verbatim by the interviewer. In the opinion of the interviewers and clinical consultants the pictures did not elicit a story but only minimal descriptions from most children. The clinical psychologists who reviewed the responses of the children intensively thus concluded that the material was too sparse to do any meaningful analysis. These psychologists also advised that the figure drawings done by the children, at the suggestion of the teachers and Mrs. Kagan, did not lend themselves to meaningful analysis. These two sources of data have therefore been eliminated from this report.

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[1] The scale used was adapted by ORES staff members from a self-concept checklist constructed by Prof. Helen Davidson and Mrs. Judith Greenberg, in conjunction with Office of Education Project No. 2805. A copy of the scale is included in Appendix C.

[2] The individual interviews were begun in the Spring of 1966 by Mrs. Joyce Kagan. After Mrs. Kagan resigned her position, the interviewing was completed by three ORES staff members, Miss Sandra Epps, Mrs. Joan Freyberg, and Mrs. Marietta Shore, each of whom interviewed children in each of the classes, so that any effect of personality characteristics of the interviewers should have been randomly distributed through the Peace Corps and non-Peace Corps classes.

[3] The drawings were specially created for this Project by Mrs. Marietta Shore, of the ORES staff.

In the first Teacher Rating Scale, each teacher rated each child on a five-point scale on ten characteristics and also judged, for each trait, whether each child had improved, stayed the same, or worsened in that trait since the previous September. This was done to obtain some measure of change, since no teacher rating data were available at the beginning of the Project.

Observational Data

To obtain further insight into the attitudes of the children themselves toward Peace Corps, the fifth graders were asked to record their reactions and feelings about the Program in logs, compositions, and year-end evaluations. An attempt was made by the teachers, Mrs. Kagan, and four student aides to make notes about the children at lunch and record some of their conversations. However, the children became aware of this notetaking and became less spontaneous in their comments. While the procedure had to be curtailed for this reason, Mrs. Kagan was able to make some most useful over-all observations.

As part of their logs, the fifth graders kept notes on their activities and also made comments about the progress of their younger buddy in regard to his work, his attitude, or his behavior. Sometimes they even quoted their younger buddies on their feelings about Peace Corps. The opinions of the fifth graders about the effectiveness of the Program are included in their logs and evaluations, in the records of the interviews with them, and in informal conversations with teachers and Mrs. Schwarz.

The second graders were verbally questioned by Mrs. Schwarz about the Peace Corps and their responses were tape-recorded by her. The second graders also dictated some compositions to their older buddies in some of which reactions to the Program were voiced. Mrs. Kagan and the teachers kept observational notes, records of activities, and notes of their reactions to what was happening during the lunch and activity periods. Mrs. Froelich, the Principal, Mrs. Schwarz, and the Peace Corps teachers gave to one of the City College staff members their reactions to and feelings about the Program and how they felt it had worked out.

During the period of September 1966 to January 1967 logs were maintained by the present sixth graders about their current Peace Corps activities with their third grade buddies. Some observational notes were also maintained by Mrs. Schwarz and the teachers from September 1966 to January 1967. All of these data are in the observational section of this report.

Analysis of the Data

Standardized test score data obtained from the California Test of Personality, the Metropolitan Achievement Test and the New York State Growth in Reading Test were analyzed using a 2 x 3 (sex x class) analysis of variance on the difference scores between pre and post tests. When the analysis of variance yielded statistically significant results, it was followed by the Scheffé method for post hoc comparison of pairs of means. Analysis of variance tests for the California Test of Personality were carried out separately for each of the two subsections of the test: Personal and Social Adjustment. The New York State Pupil Evaluation Test in Arithmetic administered in the Fall of 1966 while the children were in the third grade, was analyzed using a 2 x 3 (sex x class) analysis of variance of actual scores, since no pre-test data were available.

From two individual interviews with each child and from two different teacher rating questionnaires, responses on 61 items were obtained which could be grouped into three categories: 1) Poor or Negative,

2) Moderate or fair, and 3) Good or Positive.[1] These sets of instruments were administered in June of 1966 (at the end of the second grade) and in January of 1967 (midway in the third grade) and so constitute "Post-Post" data on the second grade experience in the Peace Corps. No pre-test data from teacher ratings or from individual interviews were obtained.

Since there was an unequal number of males and females in two of the three classes, and since preliminary analysis indicated females were rated more positively by teachers and interviewers on several items, percentages were obtained separately for males and females on each item for each class. The percentages of responses in each of the three categories (poor-fair-good) were then averaged to obtain an over-all percentage for the class, thus giving equal weight to males and females.

Sign tests were then performed to test for differences between Peace Corps and control classes. The data for the sign tests, for each of the 61 items were developed as follows: if both Peace Corps classes had a greater percentage of responses in the "good" or "positive" category than the control class a + was assigned; if only one Peace Corps class had a higher percentage of responses in the "positive" category a 0 was assigned; and if the control class had a higher percentage of responses in the "positive" category than both of the Peace Corps classes a - was assigned.

The teacher ratings and the individual interviews were intended to tap a multiplicity of behavioral and attitudinal factors and so the data were not analyzed in terms of scores obtained on a single instrument. Instead, items were grouped together in terms of their theoretical or conceptual similarity. It was thought that this procedure would best serve to present a more integrative and comprehensive picture of various aspects of behavior which the Peace Corps was hypothesized to effect. By piecing together various items from various instruments, a clearer overview of what effects the Peace Corps had would be obtained then by cutting across hypotheses to discuss specific instruments.

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[1] This trichotomous grouping was not characteristic of the original ratings on all of the instruments. The June 1966 teacher rating scale and the January interviewer rating sheet had a 5-point scale, and the January teacher rating a 7-point scale, ranging from poor to good.

This procedure, though not post hoc since the categories and groupings of items were formed prior to analysis of the data, does have certain limitations. When the data are organized and analyzed by categories both the source of the data and the date that a particular item was given does not enter into the analysis. Essentially equal weight is assigned to data obtained from content analysis of children's responses, interviewer's judgment and teacher ratings. In addition, no distinction is made between the items that were given in June of 1966 and those which were given while the child was in the third grade in January 1966. Particular care will be taken to point out any such differences or discrepancies between the source of the response and the date of the response, especially where it is felt that this might be an important source of bias.

In these sign tests analyses, 61 items were used and the source and date that these data were obtained is indicated in Figure 1 below.

Figure 1

Number and Per Cent of Total Items from Each Source and Date Administered

Source	Date				Total	
	June 1966 (Second grade)		January 1967 (Third grade)			
	N	%	N	%	N	%
Teacher Rating	10	16%	33	55%	43	71%
Interview:						
Interviewer's judgment	00	00	10	16%	10	16%
Child's Response	3	5%	5	8%	8	13%
Total	13	21%	48	79%	61	100%

For each hypothesis, a sign test was performed on all of the items relevant to that hypothesis. If this over-all test yielded statistical significance, sign tests for specific categories within each hypothesis were carried out.

In addition to tests of hypotheses, descriptive information will be provided as well as both a quantitative and qualitative analysis of the Peace Corps Program in terms of the responses of the participating children.

RESULTS

The data presented in this chapter were obtained from standardized tests as well as from interview and teacher rating questionnaires which were specially designed for this study. The individual interviews and the teacher ratings consisted of some 61 items. These items were organized in terms of their appropriateness to the hypothesis being tested. Ten of the 61 items were obtained from the second grade teachers in June of 1966. These teachers rated the children in their classes on ten behavioral and attitudinal characteristics in terms of their current status. In addition they were asked to rate the children on these items in terms of the change they had made since the beginning of the program. Children in both Peace Corps classes had higher percentages of positive ratings for eight of the ten items when teachers were asked to rate the children in terms of change or improvement, than the children in the control class. When these same teachers rated the children in terms of their current status, the situation was quite different. For only one of the ten characteristics were both Peace Corps classes rated as more positive, for four one Peace Corps class had higher and one lower per cents of positive ratings, while for five of the characteristics the control class had a higher percentage of positive ratings than either Peace Corps class. What this seems to indicate is that while the teachers of the Peace Corps classes felt more of their children had improved than the control teacher did, they also indicated a somewhat less positive perception of their children at the end of the year than the control class teacher did. Assuming that the teacher's memory was accurate and the ratings reliable, the conclusion that might be drawn from this is that the Peace Corps children were significantly poorer in these characteristics than the children in the control class at the beginning of the year. These data should be kept in mind throughout this chapter when the 61 behavioral items are considered. All of these 61 items were obtained after the year in the Peace Corps: some at the end of the second grade and the rest when the children were in the early months of the third grade. Thus, these data are post-program data only. As will be made clear during the discussion of the results, much of the evidence based on these items did not support the hypotheses of this study. In fact, in some cases the data support the alternative hypothesis attributing negative effects to the program. However, attributing no positive effects or even negative effects to the Peace Corps Program from these items necessitates the assumption that the three classes did not differ on these characteristics before the Program's inception, and as we have noted above, the teacher rating data obtained at the end of the second grade, makes this assumption doubtful.

Personal Adjustment

Hypothesis I, which stated that Peace Corps children would exhibit better personal adjustment than non-Peace Corps children, was tested in two ways. First, the data obtained from the children's responses on the first part of the California Test of Personality (Personal Adjustment) were subjected to a 2 x 3 (sex x class) analysis of variance on the difference scores between the pre and the post tests. Second, 20 relevant items obtained from teacher ratings, children's responses in individual interviews, and the judgments of interviewers were tested for significance using the sign test.

California Test of Personality

The results of the analysis of variance on the California Test of

Personality (Personal Adjustment) scores are summarized in Table 2 below. The only significant difference was between classes. Sex and interaction differences were not significant. Scheffé tests indicated that the two Peace Corps classes did not significantly differ, but each of them gained significantly more than the control class ($p < .01$). Both Peace Corps classes, therefore, showed a significantly greater change in personal adjustment from October 1965 to June 1966 than did the control class.

Table 2

Analysis of Variance on Difference Scores for California Test of Personality (Personal Adjustment)

Source	Sum of squares	df	Mean square	F
Sex	35.40	1	35.40	1.17
Class	322.45	2	161.23	5.33*
Interaction	73.64	2	36.82	1.22
Error	1422.25	47	30.26	

$^{*}p$ .01.

These significant findings, however, cannot be wholly attributed to the increase in Personal Adjustment for the Peace Corps classes from October to June. While class PC-1 had an average gain of +3.00 and Class PC-2 had an average gain of +0.48, class NPC had an average loss of -3.94.

When t tests between correlated means were performed between the pre and post test scores for each class, the results indicated that class PC-1 made a statistically significant gain from October to June, class NPC, the control class, significantly decreased from October to June and the other Peace Corps class, class PC-2, did not change significantly from October to June. Table 3 below summarizes these findings.

Table 3

Means, Standard Deviations and t Values on Pre and Post Test Scores Obtained from the California Test of Personality (Personal Adjustment) Classes PC-1, PC-2 and NPC

Class	Statistic	Pre	Post	Mean Change	t
PC-1	Mean	28.7	31.7	+3.0	2.84*
	S.D.	5.6	3.9		
	N	15	15		
PC-2	Mean	31.0	31.5	+0.5	0.36
	S.D.	5.8	6.7		
	N	21	21		
NPC	Mean	32.3	28.4	-3.9	2.73*
	S.D.	5.7	8.4		
	N	17	17		

*p <.01.

Though no norms are available for a group similar to the Peace Corps sample, comparison with existing norms[1] might provide some useful information about the sample in terms of what is generally accepted as standard or sub-standard performance.

Table 4 below shows the approximate percentiles[2] for each of the three classes on both the pre and post test scores.

Table 4

Percentiles for the Three Classes on Pre and Post Test Raw Scores on the California Test of Personality (Personal Adjustment)

Class	Pre Test	Post Test
PC-1	25	35
PC-2	35	35
NPC	35	25

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[1] Information which the Manual for the California test, 1953 revision provides on their norming group of 4,500 children from K to 3 is as follows: 1) pupils came from schools in four states, South Carolina, Ohio, Colorado, and California; 2) median I.Q. (grades 1-8) 100.0, standard deviation = 16.0; 3) of those tested, 70% (total sample grades 1-14) were making normal progress in school, 20% were retarded one-half year or more, and 10% were accelerated one-half year or more; 4) 85% were White, the rest were Mexican, Negro and other minority groups.

[2] These percentiles were obtained from the Manual.

According to the Manual, a percentile rank of 30 corresponds to a standard score of 45 or about ½ a standard deviation below the mean, and this is then generally descriptive of both the Peace Corps and the control classes in terms of the norming sample.

It is important to note that while Class PC-1 and Class NPC were significantly different from pre to post test, this was a statistically significant difference but not necessarily a meaningful one in terms of school functioning since the difference in scores was about 2 or 3 points on a test which ranges in scores from 0 to 48 points.

Interview and Rating Data on Current Status

Of the 61 items obtained from interviews and teacher ratings, 20 were classified as pertinent to the child's personal adjustment. These 20 items involved four categories: 1) Self-concept, 2) Level of Aspiration, 3) Responsibility, and 4) Nature of Affective Response. In general, the data from these 20 items did not support the hypothesis. Of the 20 items, 5 obtained a sign of + (indicating that both Peace Corps classes had a higher percentage of positive responses than the control class) and 6 signs of - (indicating that the control class had a higher percentage of positive responses than each of the Peace Corps classes). For the remaining 9 items, one Peace Corps class had a higher and the other a lower percentage of positive responses than the control class.

The probability of obtaining 5+ and 6- ratings of 11 signed ratings is .50 which does not depart from chance expectation. Since the over-all sign test on the items was not statistically significant, no additional sign tests were performed on the four separate categories within this hypothesis. In fact, if the 9 instances in which only one Peace Corps class was higher than the control class is also considered indicative of null or negative findings in view of the hypothesis, then, for 15 of the 20 items the data ran counter to the hypothesis.

Table 5 presents the percentage of good or positive ratings for the three classes on these 20 items. The table is organized in terms of the signs obtained.

From a purely descriptive point of view the entire sample tended to obtain the lowest positive percentages on the following six items: 1) "Feelings of adequacy"; 2) "Feelings toward self"; 3)"Feelings of academic competence"; 4) "Level of activity"; 5) "Sense of responsibility"; and 6) "Frequency of calm relaxed behavior." For these six items, only once did the per cent of positive ratings exceed 40%. Three of these items were interviewer judgments and three were teacher ratings from January 1967. The lowest rating came from the third grade teachers on the item "Level of activity" where the percentages of favorable ratings were .06, .34 and .19 for children in classes PC-1, PC-2 and NPC respectively.

Looking at Table 5 it can be seen that most of the items dealing with "Level of aspiration" had a high percentage of favorable responses ranging from 38% to 81% for all of the classes. Another interesting finding was that the children tended to rate themselves more often in the favorable category than the teachers or interviewers rated them. (See items 4, 7, 8 and 14.) This, however, may be an artifact of the way in which the responses given by the children were content analyzed. Their responses were categorized into the three categories of good-average-poor whereas the teacher rating data and the interviewer rating sheet had finer scale points ranging from 5, for the teacher rating in June and the interview rating sheet in January, to 7 in the January teacher rating sheet.

It can be seen that for each of the four categories the items were divided across signs except for category III which was labeled

Table 5

Percentage of "Good" or "Positive" Ratings, by Class and Signed Response Pattern, for Personal Adjustment

Category	Instrument and Date[a]	Item	Percentages of "Good" or "Positive" Ratings for Signed Response of:								
			+			0			-		
			PC-1	PC-2	NPC	PC-1	PC-2	NPC	PC-1	PC-2	NPC
A. Self-concept	I:IJ 1/67	1. Feelings of Adequacy	31	29	22						
	I:IJ 1/67	2. Feelings toward self	37	33	19						
	I:IJ 1/67	3. Feel's of Relative Academic Competence	31	39	28						
	I:CR 1/67	4. Feel's of Success in doing Things				50	84	59			
	TR 6/66	5. Self-esteem							44	17	58
B. Level of Aspiration	I:IJ 1/67	6. Reality of Aspiration Picture	57	55	51						
	I:CR 1/66	7. Evaluation--work this year				80	78	80			
	I:CR 1/67	8. Evaluation--work next year				75	60	70			
	I:IJ 1/67	9. Expectations--school progress				69	41	45			
	TR 6/66	10. Aspiration for success as student				62	38	50			
	I:IJ 1/67	11. Educational Aspiration				50	81	73			
	I:IJ 1/67	12. Certainty of Achieving Aspiration				57	68	66			
	I:CR 6/66	13. Evaluation of current work							62	57	78
	I:CR 1/67	14. Evaluation of current work							60	49	70
C. Sense of Responsibility	TR 1/67	15. Sense of responsibility							19	23	37
	TR 6/66	16. Self-direction							31	36	57
D. Nature of Affective Response	TR 1/67	17. Anger	38	67	34						
	TR 1/67	18. Level of Activity				6	34	19			
	TR 1/67	19. Appropriateness of Emotional Response				26	59	42			
	TR 1/67	20. Calm or relaxed							19	39	44

[a] I:CR = Child's Response in Interview; I:IJ = Interviewer Judgment; TR = Teacher Rating.

Note: + = Both PC > Control; 0 = One PC > Control, One PC < Control; - = Both PC < Control.

"Responsibility." The two items in this category were both minus signs, in other words the Control class had a higher percentage of positive responses than either of the two Peace Corps classes. However, there were not enough items to make any conclusive statement with regard to this category or to perform a sign test.

Teacher Ratings of Change

In addition to the 20 items grouped under Hypothesis I, there were three additional teacher rating items related to Personal Adjustment. When the teachers rated the children in June of 1966 they were asked to rate the child both in terms of his current status and in terms of his improvement since September. Those items dealing with current status of the child as of June were discussed above. Three of the change items also relate to Personal Adjustment: "Self-esteem," "Self-direction," and "Aspiration for success as a student." While the control class had a higher percentage of positive responses on the item "Self-esteem" than either of the two Peace Corps classes (Table 5), nevertheless both Peace Corps classes had a higher proportion of children rated improved in self-esteem. Similarly, while the control class had a higher percentage of children rated as being more positive in "Self-direction and independent thinking" than the Peace Corps classes, both Peace Corps classes had a higher percentage of children who were said to have improved in self-direction. On the third item, "Aspiration for success as a student," only one Peace Corps class had a higher rating than the control class in terms of current status, yet both Peace Corps classes had a higher percentage of children who were said to have improved. For the teacher rating instrument this pattern will recur throughout; second grade Peace Corps teachers rated their children as lower in current status on behavioral traits than the control teacher but at the same time they rated larger proportions of their children as improved since

September than the control teacher did.

Summary--Hypothesis I

Summarizing the results for Hypothesis I, no consistent pattern emerged. The data from the California Test supported Hypothesis I. However, in only one of the two Peace Corps classes was there a significant increase observed in personal adjustment from October to June. In addition, the scores, while varying significantly from pre to post test, did not vary in any meaningful educational sense or in terms of the norms and scores given by the Manual, with the greatest change being from the 25th to the 35th percentile. Finally, there was no support for the hypothesis on items obtained from teacher ratings and individual interviews.

Social Adjustment

Hypothesis II which stated that the Peace Corps children would exhibit better social adjustment was tested similarly to Hypothesis I. First, difference scores between the pre and post administrations of the California Test of Personality (Social Adjustment) was subjected to a 2 x 3 (sex x class) analysis of variance. Second, 23 relevant items obtained from teacher ratings, children's responses in individual interviews and the judgments of interviewers were tested for significance using the sign test.

California Test of Personality

The results of this analysis of variance on Social Adjustment difference scores are summarized below in Table 6. Significant differences were found for class and sex but not for interaction. Inspection of the means (Table 7), however, indicated that two classes (one Peace Corps, one non-Peace Corps) did not differ from each other with mean losses of 3.86 and 3.18 respectively.

Table 6

Analysis of Variance on Difference Scores for California Test of Personality (Social Adjustment)

Source	Sum of squares	df	Mean square	F
Sex	103.60	1	103.60	4.52*
Class	295.24	2	147.62	6.45**
Interaction	35.51	2	17.76	.76
Error	1076.08	47	22.90	

$^{*}p < .05$

$^{**}p < .01$

In contrast, the other Peace Corps class (PC-1) had an average gain of +1.73. Four Scheffé tests were performed to determine differences between classes and sex. The differences between classes were not statistically significant but the difference for sex was. Females did not significantly differ from October to June (a mean loss of .36) whereas the males did drop significantly from October to June (a mean loss of 3.26). While this is an interesting characteristic of the group, since there was no significant interaction effect, its importance in terms of the hypothesis being tested is limited.

t tests between correlated means performed to determine whether class PC-1 significantly improved and whether classes PC-2 and NPC significantly declined. The results indicated that while class PC-1 did not significantly improve, class PC-2 and class NPC did significantly decline. In addition, the boys significantly declined from pre to post while the girls did not.

Tables 7 and 8 below summarize these findings.

Table 7

Means, Standard Deviations and t Values on Pre and Post Test Scores Obtained from the California Test of Personality (Social Adjustment) for Classes PC-1, PC-2 and NPC

Class	Statistic	Pre	Post	Mean Change	t
PC-1	Mean	31.4	33.0	+1.6	1.02
	S.D.	5.03	5.07		
	N	15	15		
PC-2	Mean	36.3	32.4	-3.9	4.05*
	S.D.	5.3	6.3		
	N	21	21		
NPC	Mean	33.9	30.8	-3.2	2.62**
	S.D.	7.4	5.6		
	N	17	17		

*$p < .001$.

**$p < .02$.

Table 8

Means, Standard Deviations and t values on Pre and Post Test Scores Obtained from the California Test of Personality (Social Adjustment) for Males and Females

Sex	Statistic	Pre	Post	Mean Change	t
Males	Mean	34.23	30.90	-3.33	3.53*
	S.D.	6.47	5.91		
	N	31	31		
Females	Mean	34.05	33.68	-0.37	0.31
	S.D.	5.97	5.18		
	N	22	22		

*$p < .001$.

One interesting finding was that for the entire sample of children, Social Adjustment scores were 2.09 points lower on the average from October to June. This is in contrast to a drop of 0.23 for the total group in Personal Adjustment. Correlated t tests indicated that whereas the decrease in Social Adjustment was statistically significant ($t = 2.76$, $p < .01$) the decrease in Personal Adjustment was not significant.

Table 9 below presents the approximate percentiles obtained from the Test Manual for each of the three classes based on both pre and post test scores.

Table 9

Percentiles for the Three Classes on Pre and Post Test Raw Scores on the California Test of Personality (Social Adjustment)

Class	Pre Test	Post Test
PC-1	20	30
PC-2	40	30
NPC	30	20

Once again it is important to note that while there were statistically significant declines for class PC-1 and class NPC, in terms of school functioning these differences would probably not be meaningful. The difference in pre to post test scores was about 2 or 3 points on a test that ranged from 0 to 48.

Thus the scores obtained on the California Test of Personality (Social Adjustment) offer no support of the hypothesis that Peace Corps children would exhibit better social adjustment than non-Peace Corps children.

Ratings of Current Status

Of the 61 items obtained from interviews and teacher ratings, 23 were grouped together as pertinent to the child's social adjustment. Of these five were considered + (indicating that both Peace Corps classes had a higher percentage of positive responses than the control class), four obtained a rating of 0 (indicating that only one Peace Corps class had a higher percentage of positive responses than the control class), and 14 items obtained a rating of - (indicating that the control class had a higher percentage of positive responses than both Peace Corps classes). The over-all sign test indicated the probability of this distribution (5+ and 14-) was .032, and thus there were statistically significant differences in the direction opposite to what had been hypothesized. These findings contradict the hypothesis that Peace Corps children would exhibit better social adjustment than non-Peace Corps children. Rather, these results indicate the alternative hypothesis is more sensible: the control children had better social adjustment than the Peace Corps children.

Table 10 presents the 23 items divided into five categories: 1) Child feels liked by other children, 2) Consideration to peers, 3) Participation with peers, 4) Participation and involvement in the classroom, and 5) Self-control and obedience.

The most striking findings are in terms of the categories "Participation with Peers" and "Participation and Involvement in the Classroom," where in not one instance did either of the Peace Corps classes have a higher percentage of positive ratings. For participation with peers there were six - ratings and no 0 or + ratings. The sign test for this particular distribution yielded a statistically significant probability of .016. Similarly, for participation and involvement in the classroom there were five - ratings and no 0 or + items resulting in a statistically significant probability of .031. Not only did the Peace Corps classes, therefore, fail to do better than the control class in participation with peers and in the classroom, they did significantly less well.

The fifth category, self-control and obedience, did not yield a statistically significant difference.[1]

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[1] The first two categories were not considered testable since there were too few items and no matter what the distribution, significance probability of .05 or less would be mathematically unobtainable.

Table 10

Percentage of "Good" or "Positive" Ratings, by Class and Signed Response Pattern for Social Adjustment

Category	Instrument[a] and Date		Item	Percentages of "Good" or "Positive" Ratings for Signed Response of:								
				+			0			-		
				PC-1	PC-2	NPC	PC-1	PC-2	NPC	PC-1	PC-2	NPC
A. Feels liked by other children	I:CR	1/67	1. Feels liked by peers	73	66	36						
	I:IJ	1/67	2. Feels liked by peers	13	26	5						
B. Considerate to peers	TR	6/66	3. Considerate to others				69	26	33			
	TR	1/67	4. Considerate				34	19	22			
	TR	1/67	5. Shares with others							31	11	33
C. Participates with peers	TR	6/66	6. Participates							56	23	57
	TR	1/67	7. Communicates with peers							13	15	35
	TR	1/67	8. Initiates conversation							19	32	40
	TR	1/67	9. Shows interest in other's experience							19	17	23
	TR	1/67	10. Shows leadership							0	14	16
	TR	1/67	11. Plays with many children							19	32	56
D. Participates in classroom	TR	6/66	12. Contributes to class discussion							56	36	83
	TR	1/67	13. Participates in class							13	21	41
	TR	1/67	14. Contributes personal experience							25	17	37
	TR	1/67	15. Questions frequently							25	4	29
	TR	1/67	16. Involves self in reading							44	0	53
E. Obeys and shows self-control	TR	6/66	17. Shows self-control	63	47	37						
	TR	1/67	18. Stays seated	44	44	44[b]						
	TR	1/67	19. Pays attent. to adult's suggest.	25	23	0						
	I:CR	1/67	20. Gets into or causes trouble				75	32	35			
	TR	1/67	21. Shows verbal self-control				25	51	48			
	TR	1/67	22. Occupies self indep. while wait.							31	15	33
	TR	1/67	23. Obeys teacher's directions							38	29	41

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[a] I:CR = Child's Response in Interview; I:IJ = Interviewer Judgment; TR = Teacher Rating.

[b] To resolve the tie, the "moderate" category was used. Note: + = Both PC > Control; 0 = One PC > Control, One PC < Control; - = Both PC < Control.

"Leadership," "Feels liked by peers," "Interest in other children's experiences," "Questions frequently," and "Pays attention to adult suggestions," received the lowest percentages of positive ratings for the sample in general. From Table 10 it appears that the second grade teacher ratings in June were generally more positive than the third grade teacher ratings the following January. In addition, on 15 of the 22 items (one was a tie) PC-1 obtained higher percentages of positive ratings than PC-2. Four of the seven items in which PC-1 had lower percentages of positive responses were in the area "Participates with peers."

One comment should be made in the light of these findings. Of the 11 items in both "participation" categories, 9 were obtained from third grade teacher ratings given in January of 1967, and 2 were obtained from second grade teacher ratings given in June. The third grade teachers consistently rated the Peace Corps classes lower than the control classes, and possible reasons for this will be included in the discussion section.

Teacher Ratings of Change

Four of the items from the second grade teacher ratings asking about improvement since September were considered to involve social adjustment. For three of these items, "Consideration for other children," "Self-control" and "Participation," more Peace Corps children showed improvement. One item obtained ratings of 0, "Contribution to class discussion." For the items "Participation" and "Contribution to class discussion," which are crucial in view of the negative findings regarding current status, none of the children in the three classes were rated as participating or contributing less than in September. If Peace Corps children improved as much as the control class but are currently rated poorer in participation and contribution to class, it is possible that there were significant differences between the Peace Corps children and the control children in these aspects at the start of the Project. Due to the fact that there was no initial pre-Project collection of data on these items, attributing negative effects to the Program may be unjustified.

Summary--Hypothesis II

On the basis of the data analyzed, Hypothesis II was not supported either by the Social Adjustment sub-test of the California Test of Personality or the Ratings of Current Status. While one Peace Corps class and the control class significantly decreased in social adjustment from October to June as measured by the California Test, the other Peace Corps class did not change significantly. The teacher rating and interview items, however, seemed to indicate clear differences between the Peace Corps classes and the control class, but opposite to the predicted direction. Negative (-) signs were obtained for all of the 11 items dealing with both participation with peers and participation in the classroom. However, three change items, "Self-control," "Participation," and "Consideration for other children" did indicate that a higher percentage of Peace Corps children in both classes were rated as having improved.

As was previously discussed, the items reflecting current status tended to suggest differences between the two Peace Corps classes; PC-1 being more often rated positively than PC-2. The fact that the two Peace Corps classes may be different in the area of Social Adjustment is supported by the Social Adjustment scores obtained from the California Test of Personality. PC-2 significantly decreased from pre to post testing but PC-1 did not change significantly.

Attitudes Toward School

Hypothesis III which stated that Peace Corps children would have more favorable attitudes toward school than non-Peace Corps children was first tested using 14 of the 61 items obtained from teacher ratings and individual interviews judged to be related to the child's attitude toward school. These 14 items fell into two distinct areas and so two separate sign tests were performed. The first 5 items clearly related to direct attitudes toward school. The remaining 9 items included effort, study habits and attention, all of which were considered indirect manifestations of the child's attitude toward school.

The second way the hypothesis was tested was by examining attendance records in first and second grade.

Ratings of Current Status

For the 5 items relating directly to attitudes toward school, 3 obtained + signs and 2 obtained 0 signs, and none obtained - signs. Because there were only 3 items with + or - signs no sign test was carried out since significance at .05 is unobtainable. Thus, even though all 3 signed items were in the predicted direction, no statistical support could be given to the hypothesis. Table 11 presents these items and the percentages obtained.

For the 9 items relating to effort, study habits and attention, considered indirect manifestations of attitudes toward school, 2 items were rated 0 and 7 items were rated -. No items obtained ratings of +. The probability of obtaining no + ratings and 7 - ratings was found to be significant ($\underline{p} > .008$). Control children, therefore, exhibited higher percentages of favorable ratings significantly more often on these items than did Peace Corps children. Table 11 presents these items and the percentages obtained.

Teacher Ratings of Change

When these teachers were asked to rate change since September, both

Table 11

Percentage of "Good" or "Positive" Ratings by Class and Signed Response Pattern for Attitudes Toward School

Category	Instrument[a] and Date	Item	Percentages of "Good" or "Positive" Ratings for Signed Response of:								
			+			0			-		
			PC-1	PC-2	NPC	PC-1	PC-2	NPC	PC-1	PC-2	NPC
A. Attitude to School and Teacher	I:CR 1/67	1. Attitude toward school	80	90	61						
	I:IJ 1/67	2. Attitude toward school	56	69	43						
	I:IJ 1/67	3. Feels liked by teacher	25	42	23						
	I:CR 6/66	4. Attitude toward school				100	93	100			
	TR 6/66	5. Shows interest in school work				63	44	58			
B. Effort: Study habits, Work and Attention	TR 1/67	6. Homework reflects own work				75	48	57			
	TR 6/66	7. Shows ability to concentrate				50	24	29			
	TR 1/67	8. Does Homework							38	23	43
	TR 1/67	9. Does homework on time							38	23	50
	TR 1/67	10. Takes care with work							25	16	43
	TR 1/67	11. Shows persistence in task							13	0	27
	TR 1/67	12. Pays attention to lesson							19	4	20
	TR 1/67	13. Pays attention generally							25	36	39
	TR 1/67	14. Answers sensibly							25	16	50

[a] I:CR = Child's Response in Interview; I:IJ = Interviewer Judgment; TR = Teacher Rating.

Note: + = Both PC > Control; 0 = One PC > Control, One PC < Control; - = Both PC Control.

Peace Corps classes had higher percentages of children who were said to have improved in their "ability to concentrate" and in "interest in school work." Once again, none of the children in either of the two Peace Corps classes were rated as having declined, i.e., in having less ability to concentrate or less interest in school.

School Attendance

Attendance records were also obtained for the three classes. It was reasoned that improved attendance from first to the second grade would reflect a more favorable attitude toward school. While this might not be true for any given child, who might simply have had more frequent or prolonged illness, the classes should not differ systematically due to actual illness, barring epidemics. To our knowledge, there were no epidemics.

In terms of the absolute number of days absent for the first and second grades, there were no apparent differences for the second grade classes (during the Program) where the mean number of days absent for class PC-1, PC-2, PC-3 were 17.7, 12.4 and 14.5 respectively. The first grade (or pre-Program) attendance figures, however, were quite different. Children in PC-1 and PC-2 had averaged 20.8 and 22.7 days absent respectively, while the children in the control class had averaged 14.0 days absent.[1] While the two Peace Corps classes improved in attendance from the first to the second grade, the control class did not change.

For each class the number of children who had either more or fewer days absent in the second grade than in the first grade was determined. Table 12 summarizes these results.

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[1] These pre-test differences illustrate the problem of interpreting the teacher rating and interview data solely on the basis of available post-Program measures.

Table 12

Pattern of Absence in First and Second Grade of Children in the Three Classes

	Number of Students in Class		
Pattern of Absence	PC-1	PC-2	NPC
More days absent in second than first grade	5	3	10
Fewer days absent in second than first grade	8	16	7

While both Peace Corps classes had more children with fewer absences in the second grade than the first grade, the control class had more children with more absences in the second grade than in the first grade. When the data from classes PC-1 and PC-2 were combined to form a single Peace Corps sample and compared with the control class, the resulting chi-square was statistically significant.[1] Peace Corps children, and especially those from class PC-2, had more children with fewer absences in the second grade than the control class.

Summary--Hypothesis III

In terms of the teacher rating and interview items, what was thought to be the overt expression of attitude toward school indicated no differences between Peace Corps and non-Peace Corps children, but the behavioral manifestations of those attitudes were significantly negative. It should be noted, however, that the theoretical basis for the assumption that if "effort," "improved study habits" and "study skills" are considered not only manifestations of attitude but also linked with class participation, these data are consistent with the data previously reported in that area under Hypothesis II. Children who do not participate in class are also less attentive to the lesson, take less care with their work and homework and show little persistence in tasks.

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[1] $X^2 = 5.49$; 1 df; $p < .025$

Attendance data offered limited support for the hypothesis in that both Peace Corps classes had fewer absences in the second grade than in the first grade, than the control class. However, this finding is qualified by the fact that control class children were absent much less than Peace Corps children in the first grade. Once again, this suggests the possibility that Peace Corps and control children were different at the beginning of the program.

Academic Achievement

Hypothesis IV stated that the Peace Corps children would exhibit greater achievement in arithmetic and reading than the non-Peace Corps children. Arithmetic achievement was tested using the New York State Pupil Evaluation Program in Arithmetic, and achievement in reading was tested by the administration of both a pre and post test arrangement of the New York Test for Growth in Reading and the Word Knowledge and Reading sub-tests of the Metropolitan Achievement Test. 2 x 3 (sex x class) analyses of variance were used to test the children's post test scores for arithmetic achievement and pre-post difference scores for the various measures of reading achievement. In addition, the results obtained from five teacher rating items are discussed.

Achievement in Reading

The New York Test of Growth in Reading was administered to the two Peace Corps classes and the control class both in May of 1965 and 1966. Unlike other pre-test data the scores here were obtained at the end of the first grade. A summary of the results of the analysis of variance on the difference scores appears in Table 13. The only significant difference obtained was between classes. Scheffé tests indicated that one Peace Corps class improved significantly more in reading than the control class and that one of the Peace Corps classes (PC-2) also improved significantly more ($\underline{p} < .01$) than the other Peace Corps class (PC-1). Therefore, on the New York Test for Growth in Reading, both Peace Corps classes showed greater improvement in reading than the control class from May of 1965 to May of 1966.

Table 13

Analysis of Variance on Difference Scores for
the New York Test of Growth in Reading

Source	Sum of Squares	df	Mean Square	F
Sex	.18	1	.18	1.39
Class	17.53	2	8.76	66.87 *
Interaction	.08	2	.04	.29
Error	6.42	49	.13	

*$\underline{p} < .01$.

The results of t tests for correlated means, summarized in Table 14 below, indicated that all three classes significantly improved from pre to post tests. Peace Corps children, therefore, improved significantly more than control children on the Growth in Reading Test.

Table 14

Means, Standard Deviations and t Values on Pre and Post Test Scores Obtained from the New York Test of Growth in Reading for Classes PC-1, PC-2 and NPC

Class	Statistic	Pre	Post	Mean Change	t
PC-1	Mean	2.02	2.58	.55	5.17*
	S.D.	.33	.37		
	N	16	16		
PC-2	Mean	2.11	3.82	1.71	22.38*
	S.D.	.21	.25		
	N	20	20		
NPC	Mean	2.23	2.68	.45	6.30*
	S.D.	.22	.13		
	N	19	19		

*$p < .01$.

The Word Knowledge and Reading Comprehension subtests of the Metropolitan Achievement Test were administered to all classes involved in this study in October 1965 and October 1966. The difference scores between the two tests were subjected to an analysis of variance which is summarized in Tables 15 and 17.

For Word Knowledge there were no significant differences between the boys and the girls nor was there any significant interaction effect. But again, differences between the classes were statistically significant. The subsequent Scheffé tests showed one Peace Corps class gained significantly more in Word Knowledge in the one-year period than the control class.

The results of t tests for correlated means summarized in Table 16 below, indicate that all three classes significantly improved from pre to post tests with the Peace Corps classes improving significantly more than the control class.

Table 15

Analysis of Variance on Difference Scores for Word Knowledge Subtest of the Metropolitan Achievement Test

Source	Sum of Squares	df	Mean Square	F
Sex	.002	1	.002	.01
Class	2.30	2	1.15	5.38*
Interaction .	.14	2	.07	.32
Error	9.20	43	.21	

*$p < .01$.

Table 16

Means, Standard Deviations and t Values on Pre and Post Test Scores Obtained from the Word Knowledge Section of the Metropolitan Achievement Test, for Classes PC-1, PC-2, and NPC

Class	Statistic	Pre	Post	Mean Change	t
PC-1	Mean	1.56	2.27	.71	5.76*
	S.D.	.23	.31		
	N	14	14		
PC-2	Mean	1.64	2.74	1.10	10.47*
	S.D.	.28	.51		
	N	18	18		
NPC	Mean	1.70	2.34	.64	5.84*
	S.D.	.19	.45		
	N	17	17		

*$p < .01$.

In the Reading Comprehension subtest of the Metropolitan Achievement Test it was also found that the difference between the classes was significant (Table 17) while no significant difference was found between the sexes nor for interaction. The Scheffé test was again used to test for class differences and none were found. Therefore, the summated effect of all the class differences was great enough to make the F significant although there was no single difference between classes large enough to be significant by the Scheffé test.

Table 17

Analysis of Variance on Difference Scores for Reading Comprehension Subtest of the Metropolitan Achievement Test

Source	Sum of Squares	df	Mean Square	F
Sex	.08	1	.08	.44
Class	1.53	2	.76	4.14*
Interaction	.39	2	.19	1.05
Error	7.92	43	.18	

$^*p < .05$.

The results of t tests for correlated means, summarized in Table 18 below, indicate that all three classes significantly improved in reading comprehension from pre to post test.

Table 18

Means, Standard Deviations and t Values on Pre and Post Test Scores Obtained from the Reading Comprehension Subtest of the Metropolitan Achievement Test for Classes PC-1, PC-2 and NPC

Class	Statistic	Pre	Post	Mean Change	t
PC-1	Mean	1.58	2.44	.86	8.58*
	S.D.	.14	.35		
	N	14	14		
PC-2	Mean	1.67	2.68	1.01	8.66*
	S.D.	.22	.55		
	N	18	18		
NPC	Mean	1.74	2.31	.57	6.08*
	S.D.	.14	.36		
	N	17	17		

$^*p$ .001.

Achievement in Arithmetic

The results of the analysis of variance on the New York State Pupil Evaluation Test in Arithmetic administered in October of 1966 are summarized in Table 19. There were no significant differences between sexes or classes; nor was there any significant interaction. Therefore, in the fall of 1966, both of the Peace Corps classes and the control class were approximately equal in arithmetic achievement. No correlated _t_ tests were performed since these data were post-only measures.

Table 19

Analysis of Variance of Post Test Scores for the New York State Pupil Evaluation Test in Arithmetic

Source	Sum of Squares	df	Mean Square	F
Sex	.94	1	.94	.04
Class	81.44	2	40.72	1.59
Interaction	88.77	2	44.38	1.74
Error	1252.10	49	25.55	

Ratings of Current Status and Change

Four of the teacher rating items related to academic achievement. One item obtained a + sign, two signs of 0 and the remaining one obtained a - sign. No sign test was performed since significance was unobtainable. These items, summarized in the Appendix, could not therefore be used to test Hypothesis IV. In addition to these four items there was one "change" item from the June 1966 teacher's rating. This item was concerned with the child's improvement in over-all school achievement. Seventy-five per cent of Class PC-1 and 95% of Class PC-2 were rated by their teachers as having improved in over-all academic achievement from October to June whereas only 47% of the control children were said to have improved in that time.

Summary of Hypothesis IV

While there were no differences found in arithmetic achievement, the measures of reading achievement indicated that the Peace Corps children gained more than the control children. While support for this was not found in the four teacher rating items, the single change item did corroborate this interpretation.

Discussion

In considering the over-all results of this study the scope must be remembered. It was conducted in one school, and involved the children in, and teachers of, three second grade classes. With this in mind then, what do the data tell us about the success of the "Peace Corps?"

In terms of the way in which the data were organized to test the hypothesis, the data did not consistently support the hypothesized positive effects of the Peace Corps experience. In the main, this was due to the preponderance of negative findings obtained from the two teacher rating instruments. On the other hand, the data collected from standardized tests however, were generally favorable to the Peace Corps and supported certain of the hypotheses. The California Test of Personality indicated that whereas the control class declined in Social and Personal adjustment, one Peace Corps class gained in Social Adjustment, and both Peace Corps classes gained in Personal Adjustment. Thus, these data indicate that the Peace Corps halted the decline we otherwise would have expected in these areas. The standardized reading achievement data and the attendance data indicated the same positive picture. School Attendance did improve more for the Peace Corps children though their attendance record was poorer in the first grade. In reading achievement improvement was made by all classes, and one Peace Corps class showed significantly greater improvement in reading than the control class.

Adding to the positive perception from these findings were the results of the individual interviews and the June teacher ratings of improvement since September. Interviewers generally rated Peace Corps children more positively; and the second grade Peace Corps teachers rated a greater percentage of their children as having "improved since September" than the control teacher rated her class.

Considering these data, the Peace Corps program must be evaluated as successful, having achieved its goals of affecting better adjustment and thereby higher achievement of the second grade participants. Moreover, the Freyberg study of fifth grade participants indicates that they too benefited in the area of achievement (Appendix A).

In contrast to these largely positive findings, however, the results of both teacher rating instruments especially the one administered in January of 1967, while these children were in the third grade, were negative and generally disturbing. Of the 32 items on the third grade instrument, data for only four were positive, seven were neither positive nor negative, and 21 were negative. Clearly in the early months of the third grade the children from the Peace Corps classes were rated below children from the control class.

Two possibilities are suggested. First, if the Peace Corps children were poorer at the beginning of the second grade and poorer at the end of the second grade (though improved) they probably would be rated below the control class in the third grade as well. If, on the other hand, there were no real differences among the three classes at the start of the program then some "negative" experience intervened during the second grade that lowered the Peace Corps children's functioning, at least as perceived by their teacher.

This study was designed with the assumption that the three classes were reasonably comparable when the study began. This belief was supported by data obtained at the beginning of second grade on adjustment (the California Test) and reading achievement. The assumption of comparability is challenged by differences in attendance in first grade and more seriously by teacher ratings of children's current status; i.e., how they felt their children were in June at the end of the second grade. For the ten characteristics studied only for one did both Peace Corps classes have a higher proportion of positive ratings than the control class. In contrast, for five of the characteristics the control class had a higher proportion of positive ratings than both Peace Corps classes, and for the remaining four items one Peace Corps class had a higher, while the other Peace Corps class had a lower proportion of positive ratings. The fact that these second grade Peace Corps teachers generally rated the current status of their children as lower than the control children at the same time rating larger proportions of their classes as having improved suggests that at the beginning of the study the Peace Corps classes were poorer than the control class in these characteristics as perceived by teachers. It seems then that on tested characteristics, the classes were comparable, but as rated by teachers they were not. This interpretation then explains the negative findings from the third grade teacher ratings as reflecting initial discrepancies between the classes which the Peace Corps experience partially, but not completely overcame. Another possible source of non-comparability were the teachers themselves. This is a serious limitation in a small scale study, such as this where teacher differences cannot be controlled for and where significant differences between classes may be due to teacher differences.

However, we also wish to consider the possibility that the classes and teachers were comparable and the negative findings from the third grade teacher ratings are telling us something important not only about the Peace Corps experience but about tutorial programs in general.

The findings based on the teacher rating data suggested that there were three particular areas in which Peace Corps children tended to be rated significantly lower than the control: "participation with peers," "participation and involvement in the classroom," and "effort, study habits, and attention". Both participation categories were included as part of a grouping of items considered to be indicative of the child's social adjustment, whereas items in the category "effort, study habits and attention" considered indicative of manifestations of the child's attitude toward school. For the 10 second grade teacher rating items of current status and the 32 teacher rating items in the 3rd grade there were only 5 items for which both Peace Corps classes obtained higher proportions of positive ratings. Four of these five items were "self-control," "remains in seat," "pays attention to adult suggestions for improvement," and "less angry." All of these "positive" items, involve behavior which if carried to an extreme indicates docility and submissiveness, often created by rigid external controls which become internalized.

Such rigid external controls may have come from the Peace Corps buddy who became, in part, the younger child's superego. The older child wanted the younger one to succeed, to conform to the rules of the school, to be a good student and to be obedient to teacher as well as to the older child himself. The younger child played a submissive role to his older friend, womewhat like the relationship of teacher to pupil. But of course, the older child was not a teacher, and more important, was not an adult. The submissiveness to authority which often manifests itself in the teacher-pupil relationship generalized to a child-child relationship. The younger children learned how to listen to, but not how to participate with, their peers.

Probably it was difficult for the younger children to rebel against this authority because the older children expressed their good intentions, their interest and their affection for the younger children. At the same time, the older children did not act as peers with the younger children, but rather tried to play the role of teacher and authority figure. As much or more than an adult, they expressed the feelings that their success must be reflected in the younger child's achievement and general "improvement." While they were successful in getting the children to read, and in helping them with their reading (this by the way was reported to be one thing the older children were eager to do) they were not successful from an interpersonal point of view. In fact, the peculiar relationship that they established with the younger child may actually have been detrimental to his establishing relationships with his peers.

Of course one could be less psychological and explain some of the negative ratings in other ways. The lack of participation with peers may have been due to the lack of time for the younger children in the class to interact with one another. Most of their free time was spent with their Peace Corps buddy. Especially lost were two lunch periods per week, an important time for forming social relationships among peers. Instead the Peace Corps children spent that time with their older friends.

Less classroom participation and involvement as well as effort, study habits and attention may have been because in the hierarchy of important experiences in the school day, the Peace Corps experience preempted the place of other activities and made them seem less interesting in comparison. Children may not have felt eager to participate in classroom activities or class work as its importance is diminished in comparison to than seeing their friend. In addition, the younger child's affiliative needs may have been fulfilled in their relationship with their friend and as a consequence their participation with other classmates was less important to them.

These data suggest the need for controlled testing of the hypothesis that programs designed to improve children's functioning by tutorial and other activities will inevitably have negative effects on peer relationships. One might also wonder if improvement in both academic functioning and interpersonal relationships can be achieved within the same program and at the same time. Finally, one wonders if gains in achievement, particularly for initially poorly achieving children, are predicated upon weakening peer relationships. Clearly, further research is essential to determine with greater certainty whether interpersonal relationships do suffer from a program such as the Peace Corps program especially since similar tutorial programs are becoming more and more common. In evaluating these programs this study suggests that particular attention be paid to the social and interpersonal relationships rather than limited to achievement data and data based on standardized Personality Inventories.

APPENDIX A

THE EFFECT OF PARTICIPATION IN AN ELEMENTARY SCHOOL "PEACE CORPS" PROGRAM ON THE SELF-CONCEPT, SCHOOL ATTITUDES AND BEHAVIORS, AND ACHIEVEMENT OF FIFTH GRADE NEGRO CHILDREN[1]

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Submitted in partial fulfillment of the requirements
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The School of Education, The City College
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[1] This report is an abridged version of the original research study in which the History of the Project and The Review of the Literature sections have been omitted.

INTRODUCTION

The purpose of this study was to determine whether participation in a semi-tutorial role in an elementary school "Peace Corps" program made any significant changes in the self-concept, in ratings of school attitudes and behaviors, and in the achievement of fifth grade Negro children. The main purpose of the "Peace Corps" program was to help effect changes in self-concept, in ratings of school attitudes and behaviors, and in the achievement of second grade children who were experiencing difficulty in school by pairing them with fifth graders who were achieving at least at grade level and having them participate in certain activities together.

One of the purposes of the official evaluation of the "Peace Corps" program was to stimulate the development of hypotheses and to generate new ideas for research into the area of education for urban disadvantaged children. One hypothesis that developed out of the project was that perhaps the program might, in addition to whatever benefits it may have brought to the second graders, have been beneficial in some ways to the fifth graders. It was therefore decided that, as an adjunct to the "Peace Corps" Project itself, this investigator would compare the data on self-concept, ratings of school attitudes and behavior, and achievement of the average fifth grade "Peace Corps" class with those for the fifth grade control class to determine if there existed any significant differences. The average rather than the I. G. C. class was chosen for this investigator's study because inclusion of the I. G. C. class would introduce not only the factor of much higher intelligence, but also the factors of higher socio-economic status and different racial composition of the class. This is so because the I. G. C. class of this school is considered so exceptional that it attracts children from all over New York City, including those from middle income white neighborhoods.

Some of the thinking behind the main "Peace Corps" Project was that increasing numbers of disadvantaged children are underachieving in school because, if Martin Deutsch and Kenneth Clark are correct, of problems of low self-image, low motivation for academic success, and a feeling of alienation from the school and its middle-class achievement values. The "Peace Corps" program was an attempt to intervene in the development of educational problems of disadvantaged second graders by attempting to raise their self-esteem, provide them with relevant success models, and by stimulating more favorable attitudes in them toward the school and its values.

It is of course very obvious that a child is in academic trouble when he is functioning below grade level, but underachievement may be somewhat obscured when a child is meeting grade level expectations, even though he may be capable of much better achievement. Therefore, this investigator reasoned that perhaps many of the fifth graders who are about at grade level in achievement may be functioning at a lower level than they are capable of for the very same reasons that their younger buddies are underachieving (low self-image, poor motivation for academic success, and a feeling of alienation from the school and its values). It is, of course, important to rescue youngsters from severe educational handicaps, but our society can ill afford to let students with above average abilities fail to develop to their full potential.

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The goal of higher self-esteem, better academic motivation, and closer identification with the school is identical for second and fifth graders, but the factors that hopefully would be influential for change would be obviously different in this program. The relationship with the all-important and respected older child is the key element in the attempt to effect changes in the second graders. For the fifth graders, if change is found, the responsible factors in the "Peace Corps" experience are probably the closer relationships with teachers, school personnel, and City College staff members and possibly closer identification with and increased positive feelings for them.

In line with such thinking is a study almost exactly analogous to this one, conducted by Dr. Robert Cloward of the Columbia University School of Social Work, as part of a Mobilization for Youth tutorial project. In that project ninety-seven sophomore and junior high school students tutored two hundred and fifty-two elementary school children from disadvantaged backgrounds for a period of seven months. The tutors were also of lower-class background and were reading substantially below grade level. The fact that the tutors were reading substantially below grade level and that their relationship with the younger children was strictly tutorial was a noteworthy difference between Dr. Cloward's study and that of this investigator. Dr. Cloward found that in seven month's time the younger children made modest gains in reading. Most unexpectedly, he also found that the tutors gained much more--a mean gain of over three years in reading level (as measured by the Iowa Silent Reading Test) in comparison with a mean gain of one year and seven months for a control group. No significant differences were found between the tutors and the control group on pre and post measures of general school grades, attitudes toward school and school related activities, social values, educational aspirations, or interest in becoming a teacher.

PROCEDURE

Sample

The subjects for this study were fifty-nine fifth grade children, ranging in age from ten and a half to twelve years, who attended an elementary school in a disadvantaged neighborhood of Central Harlem. All but one or two of the children were Negro and were in two "average" classes in the fifth grade. One class consisted of thirty pupils (thirteen boys and seventeen girls), and the other of twenty-nine pupils (eleven boys and eighteen girls). The children in one class were paired with second grade underachieving children and participated with them in a program called the "Peace Corps" which included such activities as reading, playing learning games, writing compositions, dramatics, arts and crafts, having lunch together, outdoor free play and trips to places of interest. The children in the other class did not have this experience.

Techniques of Measurement

In order to determine the effectiveness of the "Peace Corps" program the following instruments were used to measure self-concept, school attitudes and behaviors, and achievement:

(1) Self-concept. A self-concept checklist developed by Helen H. Davidson and Judith W. Greenberg for their Good Achievers Project (funded by U.S. Office of Education) was used to assess the self-concept of these children. Four items were added to this checklist by the "Peace Corps" staff that seemed to them to be relevant for the evaluation of the main "Peace Corps" Project. This checklist consists of twenty-five descriptive adjectives and the subjects were asked individually by an interviewer to tell whether they "are that way" most of the time, some of the time, or hardly ever.

(2) School attitudes and behaviors. A teacher rating scale was devised by this investigator (for the main "Peace Corps" Project) on the basis of a review of the literature on such rating scales and under the supervision of Prof. David J. Fox, Principal Director of the Project. This instrument required that the teacher rate each child on a five-point scale (from very poor to excellent) on ten characteristics (Interest in School Work, Frequency of Contribution to Class Discussion, Ability to Concentrate, Self-Control, Consideration for Others, Self-Esteem, Social Participation, Capacity for Independent Thinking, Aspiration for Success as a Student, and Overall Achievement). The teacher was also asked to indicate for each characteristic whether the child had improved in this respect, remained the same, or declined since the previous September. These ratings were obtained for all children in both fifth grade classes.

(3) Achievement. Iowa Tests of Basic Skills were administered to the students by the school as part of a citywide testing program. Form 3 was given to the students in April 1965 when they were in fourth grade and Form 4 in April 1966 in their fifth year. The tests render scores in terms of grade level in language and arithmetic achievement.

Research Design

The fifty-nine subjects in this study were in two average fifth grade classes in a Central Harlem elementary school from September 1965 through June 1966. The composition of the classes by sex, age range, and race were very nearly similar. There was no way, of course, for equating the teacher-pupil relationship, since the children were in two separate classes, each with its own teacher. Since there was no way of manipulating class composition in any respect, the two most similar classes were chosen, but they of course were not identical. One class (the experimental group) was significantly higher in language and arithmetic achievement on the Iowa Test of Basic Skills administered, before the start of their "Peace Corps" participation, in April 1965, when the children were at the end of fourth grade. The class average in grade level terms for the experimental group ("Peace Corps" group) as of April 1965 was 4.97 for language and 4.75 in arithmetic, placing them at grade level. The class average for the control group in grade level terms was 4.46 for language and 4.06 for arithmetic, placing them three months below grade level in language achievement and six or seven months below grade level in arithmetic achievement.

The experimental group was the one chosen by the school for participation in the "Peace Corps" program because traditionally the I. G. C. (Intellectually Gifted) class and the next most highly achieving class were selected because it was felt that they would be in the best position to aid their younger, underachieving buddies. These twenty-nine subjects in the experimental group participated in the "Peace Corps" program as older buddies to underachieving second graders from September 1965 to June 1966 in activities as described above. As part of a citywide testing program, the subjects were given the Iowa Test of Basic Skills (Form 3) in April 1965 when the subjects were in fourth grade and again in April 1966 (Form 4) when they were in fifth grade. The scores for language and arithmetic achievement were obtained by this investigator from the school records in order to determine whether the experimental group improved more than the control group in achievement during the period of their "Peace Corps" experience.

Since it was not expected initially that the fifth graders would be included in the formal evaluation of the "Peace Corps" program, no pre-experiment data were obtained on self-concept. The self-concept rating scale was administered to each child in both classes in May and June 1966, as part of an individual interview in which the children were asked about their feelings about school and about the "Peace Corps." It was thought that, even though the two classes differed initially in achievement, it was not likely that the classes differed significantly in self-concept at the outset, especially since the achievement differences were not large.

No pre-experiment measure of school attitudes and behavior was obtained for the subjects. However, when the teachers were asked to rate these characteristics for each child in June 1966, they were additionally requested to estimate any change for each child since the previous September. It was also thought unlikely that there were initial differences between the two classes in ratings of school attitudes and behaviors attributable to the initial differences in achievement, especially since the differences were not large.

Tabulation of the subjects' responses in the individual interviews to the question, "Do you like school?" was carried out in terms of "Yes," "No," and "Sometimes" categories. Also tabulated were the experimental group's responses to the question, "Did the 'Peace Corps' help you in any way or teach you anything?" in terms of "Yes," "No," and "I don't know" categories. These tabulations in percentages will appear in the Results section.

It should be noted that when researchers are dealing with school situations where possibilities of experimental manipulation are minimal and where access to children may be limited, there are inherent limitations which should be considered by others interested in this type of educational research.

Analysis of Data

The data for self-concept, ratings of school attitudes and behaviors by teachers, and achievement was treated quantitatively. A two-way analysis of variance for sex and class was performed to determine any significant differences attributable to the "Peace Corps" between the two classes. Chi-square operations were carried out for teachers' ratings of the current status of each of the ten school attitude and behavioral characteristics separately for boys and girls. Chi-square operations were also carried out for the ratings of change in the ten school attitude and behavioral characteristics from September 1965 to June 1966. These operations were performed to determine any significant differences attributable to "Peace Corps" between the two classes in teachers' ratings of current status of the ten characteristics or of change in the characteristics since the previous September.

An analysis of covariance was performed by class and sex for both language and arithmetic achievement, as measured by the Iowa Test of Basic Skills, to determine any significant differences attributable to "Peace Corps" between the two classes. This statistical method was used because of the initial differences between the two groups in achievement, in order to remove any differences attributable to the initial differences between the groups on the pretest of achievement.

A table is presented containing the percentages of boys and girls in each class who said "yes," "no," and "sometimes" to the question, "Do you like school?" Another table is presented containing the percentages of boys and girls in the experimental class who said "yes," "no," and "I don't know" to the question, "Did 'Peace Corps' help you in any way?"

RESULTS

Self-Concept

The analysis of the self-concept scores was carried out to determine whether children who had the "Peace Corps" experience had more positive self-concept than those children who did not have this experience.

A total self-concept score was first obtained for each child by assigning a score of three for "most of the time," two for "some of the time" and one for "hardly ever" for each favorable item and the reverse for each unfavorable item and then summing the scores over the twenty-five items. This resulted in a total self-concept score for each child. A two-way analysis of variance for sex and class was performed. Table 1 presents the results of the analysis of variance.

Table 1. Source Table for the Analysis of Variance

Source	SS	df	MS	F	
Rows (sex)	27.72	1	27.72	.82	n.s.
Columns (class)	35.15	1	35.15	1.04	n.s.
Interaction	271.08	1	271.08	8.03	Sign. at .01
Error	1857.	55	33.76		

From inspection of Table 1 it is apparent that the only significant F ratio is for the interaction between "Peace Corps" and sex (F is 8.03, $p < .01$). Thus, in general, the "Peace Corps" experience did not affect the self-concept of the group as a whole, nor have a consistent effect on males and females. Table 2 presents the means of the males and females for each class.

Table 2. Mean Self-Concept Scores for the "Peace Corps" and non-"Peace Corps" Classes for Males and Females

	"Peace Corps"	Non-"Peace Corps"
Males	62.36	65.15
Females	65.33	59.41

In order to understand the interaction effect, "t" tests were performed between females of the "Peace Corps" class and females of the non-"Peace Corps" class, between the males in the "Peace Corps" class and males in the non-"Peace Corps" class, between the males and females in the "Peace Corps" class and between the males and females in the non"Peace Corps" class. The only significant differences were between "Peace Corps" females and non-"Peace Corps" females and between the males and females in the non-"Peace Corps" class. The interaction is presumed to be the result of the low self-concept scores of the non-"Peace Corps" females.

Thus, the hypothesis that "Peace Corps" children would have more positive self-concept than the non-"Peace Corps" children is not supported for the group as a whole, nor for boys, but some support for this hypothesis was obtained for girls.

School Attitudes and Behaviors

The analysis of the teacher rating scale data was carried out to determine whether children who had the "Peace Corps" experience were rated more positively in terms of the ten attitudinal and behavioral characteristics than those children who did not have the "Peace Corps" experience and whether the "Peace Corps" children were rated as having improved more in these ten characteristics than the non-"Peace Corps" children.

For current behavior the five rating scale points (ranging from very poor to excellent) were combined into three (above average, average, and below average). Separate chi-square tests were performed for males and females on each characteristic. Table 3 presents these chi-square values.

Table 3. Chi-square Values for Teachers' Ratings of Ten School Attitudinal and Behavioral Characteristics Between "Peace Corps" and non-"Peace Corps" Children

Trait	Males		Females	
1. Interest in School Work	4.12	n.s.	4.36	n.s.
2. Frequency of Contribution to Class Discussion	2.98	n.s.	3.38	n.s.
3. Ability to Concentrate	3.97	n.s.	2.60	n.s.
4. Classroom Behavior	4.34	n.s.	2.11	n.s.
5. Consideration for Others	13.54	Sign. at .01	5.60	n.s.
6. Self-Esteem	4.26	n.s.	2.39	n.s.
7. Social Participation	4.10	n.s.	2.05	n.s.
8. Capacity for Independent Thinking	1.62	n.s.	5.27	n.s.
9. Aspiration for Success as Student	4.12	n.s.	1.08	n.s.
10. Overall Achievement	3.17	n.s.	7.72	Sign. at .05

Inspection of Table 3 reveals only two significant chi-square values. Boys who participated in the "Peace Corps" program were judged by their teachers to be more considerate to others than boys who had not participated in "Peace Corps." Inspection of the actual data reveals that, while the "Peace Corps" boys are rated higher in consideration than the non-"Peace Corps" boys, both groups of boys were judged almost unanimously as not having changed since September. (Both groups of boys were nearly unanimously judged as having remained the same in this respect, thus indicating that the "Peace Corps" boys, for some reason, started out more considerate than the non-"Peace Corps" boys, or that the teachers' standards of judgment as to current status of the characteristic differ.)

The other significant chi-square value was for girls on overall achievement, indicating that for girls "Peace Corps" was effective in raising their overall achievement, as judged by their teachers. Two significant findings, however, are not very different from what would be expected by chance alone in twenty operations.

In the analysis of the teachers' ratings of change from September to June in each characteristic, only two rating scale points ("stayed the same" and "improved") were used since no child in either group was found to decline in any trait. Separate chi-square tests were performed for males and females on each trait to see if there were significant differences in improvement between the two classes as judged by the teachers. Table 4 presents these chi-square values.

Table 4. Chi-square Values for Teacher Ratings of Improvement in Ten School Attitudinal and Behavioral Characteristics Between "Peace Corps" and non-"Peace Corps" Children

Trait	Males		Females	
1. Interest in School Work	.14	n.s.	.01	n.s.
2. Frequency of Contribution to Class Discussion	.58	n.s.	.10	n.s.
3. Ability to Concentrate	.004	n.s.	.02	n.s.
4. Classroom Behavior	1.89	n.s.	.69	n.s.
5. Consideration for Others	.008	n.s.	1.03	n.s.
6. Self-Esteem	.02	n.s.	.02	n.s.
7. Social Participation	1.44	n.s.	6.52	Sign. at .05
8. Capacity for Independent Thinking	.20	n.s.	.76	n.s.
9. Aspiration for Success as Student	.67	n.s.	.28	n.s.
10. Overall Achievement	.20	n.s.	.01	n.s.

Inspection of Table 4 reveals only one significant chi-square value of 6.52 for girls in improvement in social participation (and it very closely approaches significance at the .01 level), indicating that, as judged by their teachers, girls who participated in "Peace Corps" improved more than girls who did not in "Social Participation." It should be noted that one could expect to get one significant value out of twenty operations purely by chance. While the "Peace Corps" girls gained more in social participation than the non-"Peace Corps" girls, it should be noted that the teachers rated the two groups similarly in current status of the trait, thus indicating that the "Peace Corps" girls started out less sociable than the non-"Peace Corps" girls or that the teachers' judgments of current status and/or of improvement are arrived at by different standards.

Inspection of actual data reveals that the lack of difference in achievement gain between the two groups is due to the fact that most children (male and female) were judged as having improved in achievement. It is obvious, since significant differences in achievement gain on the Iowa Tests were indeed found between the two groups, that the "Peace Corps" group gained more in achievement. However, there was no way for the teachers to indicate degree of change on the rating scale. It is only surprising that no significant differences between the groups were found in current status of achievement for boys, in light of the significant findings on the Iowa Tests.

It is interesting to note that the findings on teachers' ratings of self-esteem (that self-esteem is not rated higher for the "Peace Corps" group) supports the findings from the self-concept rating scale.

Thus, the hypothesis that "Peace Corps" children would improve in ratings of school attitudes and behaviors more than non-"Peace Corps" children, as judged by their teachers, is generally not supported. The hypothesis that "Peace Corps" children would be rated higher in current status of these attitudinal and behavioral characteristics than non-"Peace Corps" children is also not generally supported.

Achievement

Analyses of covariance on the pre and post experiment achievement data (grade level scores in language and arithmetic on the Iowa Test of Basic Skills, Form 3 and Form 4) were performed to determine whether the "Peace Corps" children improved more in achievement than the children not in "Peace Corps." This statistical technique was necessary in order to remove differences between the groups on the pretest of achievement. Table 5 presents the analysis of covariance for gain in language achievement.

Table 5. Source Table for Analysis of Covariance for Gain in Language Achievement

Source	SS	df	MS	F	
A (Class)	25.57	1	25.57	20.29	Sign. at .01
B (Sex)	.96	1	.96	.76	n.s.
AB (Interaction)	2.29	1	2.29	1.82	n.s.
Error	60.66	48	1.26		

Inspection of Table 5 reveals that, while the F ratios for sex and interaction are not significant, the F ratio for class is significant at the .01 level. Thus, the children, both male and female, who participated in the "Peace Corps" program improved more in language achievement, as measured by the Iowa Test of Basic Skills, than did the non-"Peace Corps" children.

Table 6 presents the analysis of covariance for gain in arithmetic achievement.

Table 6. Source Table for Analysis of Covariance for Gain in Arithmetic Achievement.

Source	SS	df	MS	F	
A (class)	17.95	1	17.95	33.87	Sign. at .01
B (sex)	0	1	.01	.02	n.s.
AB (Interaction)	2.04	1	2.04	3.85	n.s.
Error	25.52	48	.53		

Inspection of Table 6 reveals that the F ratio, while not significant for sex and interaction, is significant at the .01 level for class. This finding means that the children, both male and female, who participated in "Peace Corps" improved more in arithmetic achievement, as measured by the Iowa Test of Basic Skills, than did the non-"Peace Corps" children.

Thus, the hypothesis that "Peace Corps" children would gain more in achievement than non-"Peace Corps" children is supported.

During the individual interview with each child in the study, he was asked whether he liked school and the response was recorded. Table 7 presents the percentages of boys and girls in each group who said "yes," "no," and "sometimes" to this question.

Table 7. Percentages of Children in the "Peace Corps" and the non-"Peace Corps" Children Who Responded "Yes," "No," and "Sometimes" to the Question, "Do you Like School?"

Class		Yes	No	Sometimes
"Peace Corps" (N = 29)				
	Girls	100%	0	0
	Boys	82%	0	18%
non-"Peace Corps" (N = 30)				
	Girls	82%	0	18%
	Boys	69%	8%	23%

Inspection of Table 7 reveals that a higher percentage of the children in

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the "Peace Corps" class said they liked school than children in the non-"Peace Corps" class. No children in "Peace Corps" said they did not like school, while 8% of the non-"Peace Corps" class said they did not like it. It is also noteworthy that more girls in both classes said they liked school than the boys in both classes.

The children in the "Peace Corps" class were asked in the individual interview if they thought that "Peace Corps" had helped them in any way, or taught them anything. Table 8 presents the percentages of boys and girls in the "Peace Corps" class who said "yes," "no," and "I don't know" to this question.

Table 8. Percentages of Children in the "Peace Corps" Class Who Said "Yes," "No," and "I Don't Know," to the Question, "Did 'Peace Corps' Help You in Any Way?"

Sex	Yes	I Don't Know	No
Girls	84%	11%	5%
Boys	82%	0	18%
(N = 29)			

Inspection of Table 8 reveals that both boys and girls in the "Peace Corps" overwhelmingly felt that the "Peace Corps" experience had been helpful to them, although a small percentage (16-18%) said either they had not found it helpful or they did not know if it had been helpful.

In conclusion, the results of this study are that: (1) the hypothesis that "Peace Corps" children would have more positive self-concept than non-"Peace Corps" children is not supported for the group as a whole, nor for boys alone, but some support for this hypothesis was obtained for girls; (2) the hypothesis that "Peace Corps" children would have more positive ratings in school attitudes and behaviors and that they would be rated as having gained more in these characteristics than the control group, as judged by their teachers, is generally not supported; (3) the hypothesis that "Peace Corps" children would gain more in achievement than non-"Peace Corps" children is supported. In addition to these quantitative findings, it is interesting to note that a higher percentage of "Peace Corps" children than non-"Peace Corps" children said they liked school and that more girls (in both classes) than boys said they liked school. Finally, it should be added that an overwhelming majority of the "Peace Corps" children said that "Peace Corps" had been helpful to them.

DISCUSSION

The basic finding with regard to self-concept is that, in general, "Peace Corps" children did not have a more positive self-concept than non-"Peace Corps" children. Admittedly, it is difficult to be certain of any conclusion about self-concept in this study because of the absence of a pre measure.

There is some support for the hypothesis that "Peace Corps" girls would have a higher self-concept than non-"Peace Corps" girls, but from inspection of the mean scores and from the results of the "t" tests, it would seem that it would be more accurate to say that non-"Peace Corps" girls have a less positive self-concept than the "Peace Corps" girls. In light of the absence of a pre measure, it is possible that the non-"Peace Corps" girls started out with a lower self-concept. It is also conceivable that for girls, for whom there is probably closer identification with the female hierarchy in the school administration, there may have been some detriment to self-concept in not being selected for "Peace Corps" participation.

Another factor to be borne in mind is the one raised by Greenberg et al (1965) that, in using a non-projective measure of self-concept that is subject to conscious defensive control, one can never be certain that he is getting at real self-concept as opposed to ideal self-concept. In their study, Greenberg et al. found that underachieving boys tended to give more defensive, socially-valued responses.

At this point, it is appropriate to raise the question of why "Peace Corps" children did not in general have a higher self-concept than the non-"Peace Corps" children, as hypothesized. Since the program did give the participants an important responsibility in the school and possibly a sense of closer identification with the school administration and teachers, it would be expected that this would favorably influence self-concept. It should be remembered that, while Jersild (1952), Sullivan (1954), Erikson (1959) and Taba (1953) have stressed the important role that the school can play in raising self-esteem, the actual "Peace Corps" experience for these children consisted of three hours a week for nine months. In light of the studies of Rosen (1959), Reissman (1962), Ausubel and Ausubel (1963), Clark and Clark (1950), and Deutsch (1960), indicating the close relation of self-esteem to the quality of the mother-child interactions and to some of the child's earliest experiences, it would be unreasonable to expect quick change in three hours a week for nine months. Sullivan and Erikson have related self-esteem to the deepest levels of psychic experience and found it to be largely the product of unconscious motivation.

Clark and Clark (1950) found acute awareness of the negative implications of being a Negro at ages three to seven years. These considerations should not be construed as the discouragement of such programs, but rather to point to realistic expectations about the ability of schools to alter such deep-seated and deeply-rooted parts of the personality. It is likely that to realize change in the area of self-concept, longer and more intensive programs of this sort would have to be instituted, preferably for the duration of the disadvantaged child's school career.

In regard to school attitudes and behavior, as judged by teachers, it was found, in general, that there were no significant differences between the "Peace Corps" and non-"Peace Corps" groups. The few significant results could have been obtained purely by chance. One of the significant findings was that teachers rated boys in "Peace Corps" higher in "Consideration for Others" than non-"Peace Corps" boys. However, since both teachers found that most boys remained the same in this trait from September to June, either it is true that "Peace Corps" boys were more considerate initially or the teachers were using different standards of judgments.

Another significant finding was that "Peace Corps" girls were rated higher in "Overall Achievement" than non"Peace Corps" girls by the teachers. The fact that boys in "Peace Corps" were not judged higher in achievement than non-"Peace Corps" boys by their teachers is surprising in light of the fact that "Peace Corps" boys did in fact gain more than non-"Peace Corps" boys in achievement on the Iowa Test. It is possible that the teachers included non-academic considerations in the term, "Overall Achievement." The fact that "Peace Corps" boys were not rated higher in achievement by the teachers when in fact they did gain more in achievement than the control group, may reflect differences in teachers' standards of judgment.

The fact that there was no significant difference between the two groups' ratings on gain in achievement reflects the fact that nearly all children in both groups were rated as having improved from September to June. This finding does not rule out the possibility that in the teachers' judgments the "Peace Corps" group gained more than the non-"Peace Corps" group, as there was no way of indicating different degrees of change on the rating scale.

The "Peace Corps" girls gained more than the non-"Peace Corps" girls in "Social Participation," but were not rated higher in current status, indicating either that the "Peace Corps" girls were initially less sociable or that the teachers' standards of judgment were different.

It must be clearly recognized, in trying to draw any conclusions from these data, that the ratings were done by two different teachers who may well have had different standards of judgment and also that the teachers' perceptions of change may have been influenced by the current status of the child in a particular trait.

It should be noted that the finding of no difference between groups in school attitudes and behaviors, including achievement aspiration, is similar to the findings of Dr. Robert Cloward (1966) in his study of tutors. Dr. Cloward also found differences in achievement gain (reading level) between the tutors and the non-tutors, but no differences in attitudes toward school, school-related activities or educational aspirations.

Possible explanations for these findings in this study and in Dr. Cloward's that suggest themselves are that attitudes and aspirations are not only more difficult to change than achievement, but also harder to measure with validity. It may also be that the short duration of participation in these programs (nine months for "Peace Corps" and seven months in the Cloward study) and the small amount of school time actually devoted to these activities, while sufficient to improve intellective achievement, is not sufficient to alter the more deep-seated and fundamental characteristics of attitude and aspiration which have their earliest roots in infancy. Achievement is a relatively more superficial level of psychic functioning than such things as attitude and aspirations, according to such authorities as David Rappaport (1945) and Anderson and Anderson (1951). It would be of great interest to follow up children who participate in such programs over two or more years (as is now being done with the "Peace Corps" program) to see if longer participation would reveal greater differences in school attitudes and behaviors including achievement motivation. While authorities seem to agree that the school is a powerful agent in influencing such attitudes and aspirations, it may take more than one academic year to effect changes in areas that have very deep-seated roots.

On this point (the difficulty of altering attitudes and aspirations) such studies as Rosen (1959) should be recalled. He found achievement motivation closely related to the attitudes of the mothers of the children, and the social class into which the child was born and by which he has been influenced since birth. Kahl (1957) found a close relationship between achievement motivation and father's occupation. Katkovsky (1963) and Crandall (1960) found a close relationship between parents' values and their systems of reward and punishment and the achievement motivation of their children. Chapman and Volkman, and Hyman (in Herriott, 1963) speak of the early influences of a child's cultural group and cultural frame of reference on the development of academic motivation. In view of the very early and pervasive nature of these influences on the development of achievement motivation, it would be more realistic to look for change in the area of attitude and aspiration over a longer span of time and on a more intensive basis than either "Peace Corps" or Dr. Cloward's tutorial program provided.

In contrast with the above findings, the data on achievement gain is most clearcut and encouraging. "Peace Corps" boys and girls gained more in language and arithmetic achievement during the duration of their "Peace Corps" participation (even when differences to be expected on account of the initial difference between the groups in favor of the "Peace Corps" class are removed). This finding is also in line with the findings of Dr. Cloward's study in which he found that the tutors in seven month's time gained over three years in reading level in contrast with the control group's improvement of one year and seven months, as measured on the Iowa Silent Reading Test. As said before, intellectual achievement is a more superficial, conscious area of psychic functioning and therefore more amenable to change than deeper, more unconsciously motivated areas such as self-concept, attitudes, and aspirations. There also happen to be more highly developed, valid, and standardized ways of measuring intellectual achievement than self-concept, attitudes, and aspirations.

While it should not be forgotten that the "Peace Corps" class did have a different and possibly more effective teacher than the non-"Peace Corps" class, this finding in regard to achievement gain should serve to encourage the development of such programs as "Peace Corps" which apparently benefit two separate groups (second graders and fifth graders) in the same operation. While explanations for such findings can be elusive and multifaceted, the identification with the school administration and City College and its values of learning on the part of the "Peace Corpsmen" quite probably played a major role in their greater achievement gain. Another factor is also the actual practice and contact with academic matter that was involved in helping the younger children with their work. It should be remembered, however, that the relationship between the buddies was not purely tutorial and involved many other activities. Several "Peace Corpsmen" did volunteer the information to the interviewers that helping their younger buddies with their work refreshed them on things they had forgotten or somehow missed when they were in second grade. In fact, there is an old educational saw to the effect that there is no better way to learn than to teach.

At this point it should be noted that in Dr. Cloward's study the relationship between the older and younger students was strictly tutorial whereas in this study tutoring, as mentioned above, was just one aspect of the "Peace Corps" relationship. Despite this lesser emphasis on actual tutoring in "Peace Corps," the participants did improve more in language and arithmetic achievement than the control group.

The findings of this study point up the important fact that children do not need to be in serious academic trouble or be achieving far below grade level to be underachieving. Particularly in disadvantaged areas where there are frequent problems of low self-esteem, inadequate achievement motivation, and feelings of alienation from the school and its values (resulting from the existing social conditions of such disadvantaged areas) schools must be aware of the possibility of finding many underachieving children in average, grade level classes. Our society cannot afford to let any child's talent, below average, average, or above average, go to waste.

Directly on the point of the children's feelings about school, it is also encouraging to the continuation and expansion of "Peace Corps" programs that a substantially higher percentage of the children, both boys and girls, in "Peace Corps" said they liked school. All the children questioned gave reasons to substantiate their replies to the question about school, thus probably ruling out as an important factor the possibility that some children gave replies they thought the interviewer wished to hear or that would be considered socially acceptable. It is also important to note that in both classes a higher percentage of girls liked school than boys. This may be related to the finding of Deutsch (1960) that Negro girls have a better personal, social, and scholastic adjustment than boys and that Negro boys bear the major brunt of the negative implications of their racial membership. The finding may also relate to the fact that elementary schools are rather women-oriented and women-controlled institutions that may well be more favorably inclined toward female personalities and behaviors.

Another important finding is that an overwhelmingly large proportion of the "Peace Corps" children felt that the experience had been helpful to them and all of them substantiated their replies. Some of the replies were most thoughtful and insightful such as "I learned how to help and understand others," "I learned how to take care of little children and help them with their problems," and "It helped me with some things I had forgotten from second grade," etc. Thus, whether or not measurable differences are found between the two groups, the children themselves have judged the "Peace Corps" as a success for them and have had a most favorable school experience.

In conclusion, it may be said that, after a nine-month "Peace Corps" experience consisting of three hours a week, the fifth grade children who

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participated in the program in semi-tutorial roles did not have more positive self-concept, nor more positive school attitudes and behaviors, but did gain significantly more in language and arithmetic achievement than a similar group of fifth graders who did not so participate. In addition, a substantially higher percentage of the "Peace Corpsmen" said they liked school than the non-participants, and the majority of them felt that "Peace Corps" had been a useful experience for them. These findings partially support the original hypothesis of the study, are consistent with theoretical and research studies in the areas of self-concept and achievement motivation (particularly of Negro disadvantaged children) and is in substantial agreement with the project studied by Dr. Robert Cloward of the Columbia University School of Social Work who found that high school students who tutored elementary school students in reading for seven months improved in reading significantly more than students who did not participate in the tutorial program.

The implications of this study are that school programs such as the one described herein are realistic, inexpensive, and practical ways of meeting the problems of educational handicap experienced by increasing numbers of urban, especially Negro children from disadvantaged backgrounds. Such programs as this, built upon the strengths of the children themselves, hold out the possibility of helping not only the younger children, but also the older tutoring buddies; not only the children below grade level, but those at grade level who are nevertheless not achieving up to their potential. Even a short-term program can bring marked gains in intellective functioning, that outer level of psychic functioning that is most conscious and amenable to change. With longer and more intensive programs and, with improved instruments of measurement, there is good reason to expect changes in more deeply-rooted personality areas such as self-concept, attitudes, and achievement motivation.

Further research may well be directed toward longitudinal studies of the participants in such programs and follow-ups on the participants later in their school career. There are many variables involved in such programs that could be fruitfully explored such as the effect of teacher experience, personality and teaching methods, and race; differential effectiveness of average and Intellectually Gifted fifth grade tutors; differential effectiveness of older buddies from the same or different racial and economic backgrounds, etc. One value of a study such as this one is to generate new hypotheses and to stimulate more research into similar ways of dealing with the particular problems of urban education and also to point up some of the difficulties and problems of conducting research in a school setting.

SUMMARY

For four years there has been a program called the "Peace Corps" in one of the public elementary schools in a disadvantaged area of Central Harlem. In this program fifth grade students in average and Intellectually Gifted classes were paired with second grade youngsters who were achieving below grade level. In September 1965 the Office of Research and Evaluation of the School of Education at City College, funded by the U.S. Office of Education, decided to participate in the formal evaluation of the effectiveness of the program which included such activities as reading, dramatics, arts and crafts, composition writing, learning games, outdoor free play and trips. The data on the effectiveness of the program in raising self-concept and achievement motivation toward the end of greater school success among the second graders is being collected for inclusion in a final report to the Office of Education in January 1967.

This investigator wished to explore the possibility that perhaps the fifth graders who had served as older buddies would also benefit from their participation. The hypothesis for this study was that fifth graders who participated in an elementary school "Peace Corps" program in semi-tutorial roles would gain in self-concept, school attitudes and behaviors, and achievement significantly more than fifth graders who did not so participate.

To test this hypothesis self-concept rating scales were administered to each child in an average fifth grade class who had been in "Peace Corps" and to each child in an average fifth grade class not in "Peace Corps" in June 1966, after nine months of participation in the program. Each child was also given a short individual interview to determine his feelings about school and about "Peace Corps." In June 1966, the teachers of these two fifth grade classes were given a rating scale for each child. The teacher was asked to rate each child on each of ten school attitudes and behaviors for current status and also to indicate if the child had stayed the same, improved or declined in this trait since the previous September. Scores for all children on Iowa Tests of Basic Skills on the April 1965 and the April 1966 administrations were obtained from the school records.

Analysis of the data revealed that there were no significant differences in self-concept or school attitudes and behaviors between the two groups. However, the children in "Peace Corps" gained significantly more in language and arithmetic achievement than did the children not in "Peace Corps." Additionally, a substantially higher percentage of the "Peace Corps" children said they liked school than the non-"Peace Corps" children, and the majority of the "Peace Corpsmen" said that the program had been a useful experience for them.

The findings of this study are encouragement for the establishment of similar programs in schools located in urban disadvantaged neighborhoods, as an effective way of helping two sets of children in one undertaking and of meeting the problems of low self-esteem, poor achievement motivation, and feelings of alienation from the schools and their values which, according to experts are the causes of poorer achievement among disadvantaged children.

It is also suggested that with more intensive and extensive use of such programs, it is reasonable to expect some change in the more deep-rooted personality aspects of self-concept, attitudes, and achievement motivations, as well as actual gain in academic performance. Suggestions have been made for studies of a longitudinal nature and ones in which other variables in the situation, such as teacher differences and tutor differences, are explored.

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APPENDIX B

Peace Corps Project Staff

Name	Position	Source of Support
Dr. David J. Fox	Principal Investigator	The City College
Mrs. Peggy Schwarz	Co-Principal Investigator	The City College
ORES Staff		
Mr. Norman Shapiro	Research Assistant	The City College
Mrs. Joan Freyberg	Research Assistant	The City College and Project Funds
Miss Judith Guthwin	Teaching Assistant	The City College
Mrs. Marietta Shore	Research Assistant	The City College and Project Funds
Miss Linda Curtis	Research Assistant	The City College
Miss Sandra Epps	Research Assistant	The City College
Mrs. Joyce Kagan	Supervisor of Program P. S. 129	Project Funds
Teaching Staff of P. S. 129		
Mrs. Joyce Landau*	Supervisor of Program Activities	Project Funds
Mrs. Miriam Fox*	Supervisor of Program Activities	Project Funds
Mrs. Ursula Larizza*	Supervisor of Program Activities	Project Funds
Mrs. Clementine Green	Supervisor of Program Activities	Project Funds
Miss Marjorie Campbell*	"	"
Mr. Murray Schnitzer*	"	"
Miss Margaret Spies*	"	"
Miss Marie Vitacca*	"	"
Miss Joyce Vidal*	"	"
Clerical Staff		
Mrs. Sophie Colten	Statistical Clerk	The City College and Project Funds
Secretarial Staff		
Mrs. Jeanette Liebman		The City College and Project Funds
Mrs. Rita Roth		The City College

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* These staff members are teachers at P. S. 129 who supervised specific Peace Corps activities during non-teaching hours.

APPENDIX C

PEACE CORPS PROJECT

Student Interview (Peace Corps)

Name:____ Class:____________

Interviewer:__________________________________ Date:____________

1. Do you like to come to school? Why?

2. What activity do you like best in school?

3. What is your best subject?

4. How are you doing with your work?

5. How do you think you will do next year?

6. What do you think of the Peace Corps?

7. Would you like to be in the Peace Corps next year?

8. Do you like your Peace Corps friend? Why?

9. What things did you do with your friend?

10. Did your friend help you in any way?

PEACE CORPS PROJECT

Student Interview (Control)

Name:____ Class:______________

Interviewer:____________________________________ Date:______________

1. Do you like to come to school? Why?

2. What activity do you like best in school?

3. What is your best subject?

4. How are you doing with your work?

5. How do you think you will do next year?

6. Have you heard about the Peace Corps?

7. What do you think about the Peace Corps?

8. Would you like to be in the Peace Corps next year?

Name______________________________ Interviewer_______________________

Class____________________ Date and Time_____________________

INTERVIEW GUIDELINE - PEACE CORPS

1. Do you like school? Why?

2. What are your favorite subjects or activities?

3. What don't you like about school?

4. How are you doing in school?

5. Do you usually succeed in things you are trying to do?

6. Do you get into trouble or cause trouble very often?

7. Do the other children like you and want you to do things with them?

8. How do you think you will do in school this year?

9. What do you mean when you say you'll do_____________?

10. What do you want to be when you grow up?

11. Do you think you will get to become a__________________
    YES NO

12. Why?

13. If you can't get to become a__________________
    what would you want to become?

PEACE CORPS PROJECT

Name:________________________________Class_______________Date________________

Directions: The words on this page tell different ways children are. Read the words next to each number. Put a cross (X) in one box on each line to show whether you think you are that way MOST OF THE TIME or SOME OF THE TIME or HARDLY EVER.

	MOST OF THE TIME	SOME OF THE TIME	HARDLY EVER
1. Neat			
2. A big help at home			
3. Smart in school			
4. Shy (quiet)			
5. A pest			
6. Very good in art			
7. Friendly			
8. Full of fun			
9. A hardworker			
10. Polite			
11. Trying my best			
12. Nice looking			
13. Lazy			
14. Full of questions about new things			
15. Going to do well next year			
16. Sad			
17. Good in sports			
18. Careless			
19. Helpful			
20. Good in reading			
21. Good at making things			
22. Bad			
23. Liked by other children			
24. Kind (nice to other children)			
25. Good in writing			

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Name____________________________________ Interviewer______________________

Class_________________ Date and Time____________________

CHECKLIST FOR SELF CONCEPT AND ASPIRATION - PEACE CORPS

1. To what extent does child feel liked by teacher?
    1. extremely disliked
    2. slightly disliked
    3. average
    4. well liked
    5. extremely well liked
    6. no basis for judgment

2. To what extent does child feel liked by other children?
    1. extremely disliked
    2. slightly disliked
    3. average
    4. well liked
    5. extremely well liked
    6. no basis for judgment

3. What are the child's feelings about himself?

    1. very negative
    2. somewhat negative
    3. average
    4. somewhat positive
    5. very positive
    6. no basis for judgment

4. What are the child's feelings of adequacy?
    1. very poor
    2. poor
    3. average
    4. good
    5. excellent
    6. no basis for judgment

5. Strength of child's negative feelings about himself.
    1. strong negative feelings
    2. more than average negative feelings
    3. moderate, average negative feelings
    4. less than average negative feelings
    5. no negative feelings
    6. no basis for judgment

6. Attitude towards school
    1. very negative
    2. somewhat negative
    3. average
    4. somewhat positive
    5. very positive
    6. no basis for judgment

Name____

7. Where child places himself in relation to his peers in academic competence?
    1. much worse than most
    2. somewhat worse than most
    3. average, better than some, worse than others
    4. somewhat better than most
    5. much better than most
    6. no basis for judgment

8. Expectations about progress in school
    1. very low
    2. low
    3. average
    4. good
    5. very high
    6. no basis for judgment

9. Ultimate aspiration of child - aims of education
    1. very low aspiration
    2. low
    3. average
    4. good
    5. very high
    6. no basis for judgment

10. Child's certainty of achieving aspiration
    1. certain
    2. reasonably sure
    3. doubtful
    4. no belief will achieve it
    6. no basis for judgment

11. Reality of aspiration picture
    1. very realistic
    2. somewhat realistic
    3. somewhat unrealistic
    4. very unrealistic
    6. no basis for judgment

12. Was this child in Peace Corps, in your judgment? YES NO

PEACE CORPS PROJECT - TEACHERS' RATINGS

PUPIL______________________________ CLASS________________
TEACHER______________________________ DATE________________

Characteristic	Current Status (circle one)	Change since Sept. (circle one)
1. Interest in school work	1. No interest 2. Little interest 3. Average 4. Good interest 5. Very strong interest	1. Less interest 2. Same 3. More interest
2. Frequency of Contributions to Class Discussions	1. No contribution 2. Little contribution 3. Average 4. Good contribution 5. Outstanding contribution	1. Less frequent 2. Same 3. More frequent
3. Ability to Concentrate	1. No ability 2. Slight ability 3. Average 4. Good ability 5. Outstanding ability	1. Less ability 2. Same 3. Increased ability
4. Classroom Behavior (Self-control)	1. Constant misbehavior 2. Frequent misbehavior 3. Average misbehavior 4. Usually well-behaved 5. Nearly always well-behaved	1. More misbehavior 2. Same 3. Less misbehavior
5. Consideration for other children	1. No consideration 2. Slight consideration 3. Average 4. Frequent consideration 5. Nearly always considerate	1. Less consideration 2. Same 3. More consideration
6. Self-Esteem (Self-satisfaction)	1. Very poor self-esteem 2. Slight self-esteem 3. Average 4. Good self-esteem 5. High self-esteem	1. Less self-esteem 2. Same 3. More self-esteem
7. Social Participation with other children (Self-direction)	1. Very withdrawn 2. Somewhat withdrawn 3. Average 4. Good involvement 5. Frequent involvement (Outstanding)	1. More withdrawal 2. Same 3. More involvement
8. Capacity for independent thinking and action	1. No capacity 2. Slight capacity 3. Average 4. Good capacity 5. Excellent capacity	1. Decreased capacity 2. Same 3. Increased capacity

9. Aspiration for Success as a Student	1. No desire for school success 2. Slight desire 3. Average 4. Substantial desire 5. Strong desire for school success	1. Lower aspiration 2. Same 3. Increased aspiration
10. Achievement (Overall school performance)	1. Very poor 2. Fair 3. Average 4. Good 5. Excellent	1. Decline 2. Same 3. Improvement

DIRECTIONS: Listed below are items which concern the behavior and functioning of the children in your class. The items were selected to cover five general areas: homework habits, academic classwork habits, non-academic classwork habits, social and emotional adjustment to classroom structure, social and emotional adjustment in relation to other children.

For each item we ask you to please rate the child's behavior but only on the basis of what you have actually observed. In other words, do not make inferences. If you have not observed a particular behavior circle the category don't know (DK). If a particular item does not apply to the child you are rating circle the category not applicable (NA). These two options are printed after each item. If the item does apply and you have seen the behavior, rate the child's behavior using the scale from one (1) to seven (7) below each item. The ends of the scale, numbers one and seven, represent the extremes of the behavior in question and each extreme is described for you. The middle number four (4) usually means that this child's behavior is characterized by neither extreme, but is average. Where number four has some special meaning for an item, it too is described for you. The numbers two (2) and three (3) and five (5) and six (6) represent intermediate degrees of the behavior - more than average, but not extreme. Obviously, two and three are to be used for intermediate degrees towards the left (No. 1) extreme and five and six for intermediate degrees towards the right (No. 7) extreme.

Rate each item by circling the appropriate number.

I. Homework habits

1. EXTENT TO WHICH HOMEWORK IS DONE - - DK NA

always						never
1	2	3	4	5	6	7

2. EXTENT TO WHICH HOMEWORK IS DONE ON TIME - - DK NA

always						never
1	2	3	4	5	6	7

3. EXTENT TO WHICH HOMEWORK REFLECTS OWN WORK - - DK NA

always						never
1	2	3	4	5	6	7

II. Academic classwork habits: academic interest and involvement

4. CARE WITH WORK - - DK NA

always careful and neat						always careless and/or sloppy
1	2	3	4	5	6	7

5. ATTENTION SPAN WITH REGARD TO ACADEMIC ASPECTS OF CLASSWORK - - DK NA

completely sufficient						completely inadequate
1	2	3	4	5	6	7

6. FREQUENCY WITH WHICH UNDERSTANDS MAIN IDEAS IN AN ACADEMIC LESSON - - DK NA

always						never
1	2	3	4	5	6	7

7. FREQUENCY WITH WHICH UNDERSTANDS RELATIONSHIPS BETWEEN IDEAS IN AN ACADEMIC LESSON - - DK NA

always						never
1	2	3	4	5	6	7

8. FREQUENCY WITH WHICH GENERALIZES IDEAS IN ONE LESSON TO OTHER AREAS OF STUDY - - DK NA

always						never
1	2	3	4	5	6	7

9. EXTENT OF CLASS PARTICIPATION - - DK NA

always raises hand when teacher asks for volunteers to answer questions			does not volunteer but answers when called on			reluctant to answer when called on in class
1	2	3	4	5	6	7

10. NATURE OF VOLUNTEERING - - DK NA

always answers sensibly when volunteers						never knows answer when called on after volunteering
1	2	3	4	5	6	7

11. PERSISTENCE IN A TASK - - DK NA

does not give up easily even when not succeeding						easily discouraged if not succeeding
1	2	3	4	5	6	7

12. ABILITY TO COMMUNICATE VERBALLY WITH PEERS - - DK NA

always communicates ideas verbally with ease						consistently has trouble communicating ideas
1	2	3	4	5	6	7

13. EVIDENCE OF READING INVOLVEMENT - - DK NA

always reads on free time or uses library or chooses to do book reports						does no extra-curricular or free reading
1	2	3	4	5	6	7

14. EXTENT OF QUESTIONING

always asks questions i.e. to clarify or seek information						never asks questions
1	2	3	4	5	6	7

III. Non-academic classwork habits

15. ATTENTION SPAN WITH REGARD TO NON-ACADEMIC ASPECTS OF CLASSWORK SUCH AS ARTS AND CRAFTS ETC. - - DK NA

has sufficient attention span						attention span inadequate
1	2	3	4	5	6	7

16. FREQUENCY OF CONTRIBUTION OF PERSONAL EXPERIENCE TO CLASS DISCUSSION - - DK NA

always contributes personal experiences						never contributes personal experiences
1	2	3	4	5	6	7

17. EXTENT OF OBEDIENCE TO TEACHER DIRECTIONS REGARDING LINING UP, FIRE DRILLS ETC. - - DK NA

always obeys teacher directions
never obeys teacher directions
1 2 3 4 5 6 7

IV. Social and emotional adjustment to classroom structure: its rules and procedures

18. SENSE OF RESPONSIBILITY - - DK NA

can always be depended on to carry out a task; is responsible
can never be depended on to carry out a task, is irresponsible
1 2 3 4 5 6 7

19. EXTENT OF CHEATING - - DK NA

never cheats in class on tests
regularly cheats in class on tests
1 2 3 4 5 6 7

20. ABILITY TO OCCUPY HIMSELF INDEPENDENTLY IN MOMENTS WHEN WAITING FOR NEXT ASSIGNMENT - - DK NA

usually engages in appropriate independent activity
neither occupies self nor is disruptive
is disruptive to class
1 2 3 4 5 6 7

21. ABILITY TO STAY SEATED - - DK NA

never gets out of seat without permission
continuously gets out of seat without permission
1 2 3 4 5 6 7

22. VERBAL CONTROL -- DK NA

never speaks out of turn
continuously speaks out of turn
1 2 3 4 5 6 7

23. LEVEL OF ACTIVITY - - DK NA

characteristically alert, energetic
characteristically listless, tired
1 2 3 4 5 6 7

24. CHARACTERISTIC MODE OF RESPONSE - - DK NA

characteristically calm, relaxed
characteristically tense, anxious
1 2 3 4 5 6 7

25. TEMPERAMENT - - DK NA

is not easily angered					gets angry easily	
1	2	3	4	5	6	7

26. APPROPRIATENESS OF EMOTIONAL RESPONSE TO SITUATION - - DK NA

always appropriate					typically responds with emotional excess	
1	2	3	4	5	6	7

27. CONSIDERATION OF ADULT SUGGESTIONS FOR IMPROVEMENT - - DK NA

listens and evaluates; carries out some suggestions and not others		always carries out adult suggestions			pays no attention to adult suggestions	
1	2	3	4	5	6	7

V. Social and emotional adjustment in relation to other children

28. FREQUENCY WITH WHICH CHILD SHARES - - DK NA

always shares possessions with other children		neither shares nor takes			always takes other children's possessions	
1	2	3	4	5	6	7

29. FREQUENCY WITH WHICH INITIATES CONVERSATIONS - - DK NA

always initiates conversations with other children		doesn't initiate but joins			neither initiates nor joins	
1	2	3	4	5	6	7

30. INTEREST IN OTHER CHILDREN'S EXPERIENCES AND HOMELIFE - - DK NA

displays great curiosity					never displays curiosity	
1	2	3	4	5	6	7

31. EXTENT TO WHICH EXHIBITS LEADERSHIP QUALITIES IN PLAY ACTIVITIES WITH PEERS - - DK NA

consistently exhibits leadership qualities		neither leads nor follows			consistently follows others' leadership	
1	2	3	4	5	6	7

32. NATURE OF AGGRESSIVE PATTERN - - DK NA

when aggressive does not single out same children					when aggressive singles out same children	
1	2	3	4	5	6	7

33. CHARACTERISTIC COMPOSITION OF GROUP WITH WHICH CHILD TYPICALLY INTERACTS - - DK NA

joins in activities and conversations with children of all ability levels and ethnic groups represented in the class					stays with small group of children	
1	2	3	4	5	6	7

34. NATURE OF INTERACTION WITH PEERS IN GENERAL - - DK NA

is considerate and kind to other children, i.e. willing to share, help with homework					is selfish and mean to other children i.e. unwilling to share and help with homework	
1	2	3	4	5	6	7

APPENDIX D

Appendix D

Observational Notes on the Implementation of the "Peace Corps" Program by Mrs. Peggy Schwarz, Co-Principal Investigator

Observations on Children

From the onset of the Project both the older and the younger children seemed to have a general understanding of their roles. The older children were very solicitous of the younger children; they played games with them during lunch time play period and were quite hurt when the younger children kicked them or called them names. However, at times it was difficult to make the older children understand that these children needed and wanted their attention more than anything else. It had to be explained to the older children that that was exactly what the Project was about without going into psychological terminology. After many weeks of being together, one sixth grader volunteered that her little friend "didn't use bad words as she used to."

The Senior Peace Corpsmen were asked to do something beyond their school work; they realized their responsibility and came through remarkably well. They actually had no experience with younger children except for those who had younger siblings and even for those the relationship with the younger children was considerably different. The feeling of responsibility that was engendered in the older children was such that they felt that they could not, no matter how difficult the younger ones were, let them down. Sometimes the older children were too ambitious, too insistent, too demanding, but the younger children came to accept them as their close friends and perhaps anything less than such insistence would have given the younger children a feeling of rejection.

The younger children came to depend upon their older friends. They looked forward to their lunch together, to their activity program, and to the various invitations each would offer the other. It was observed that many of the younger children refused to eat their lunch unless their older friends were seated beside them. Frequently these younger children who as a rule don't make much conversation with anyone nor answer with more than single words when spoken to, engaged in lively conversations initiated by their older buddies. Questions such as, "What did you do last night?", "Did you like that program on T.V.?", "What did you get for Christmas," etc., showed that their older friends were very interested in them and the younger ones responded accordingly.

The younger children enjoyed the individual attention given them by their older friends. They didn't object to reading as they had in the classroom. One little girl remarked, "I love my friend; she learns me everything." And if by chance the activity class had to be cancelled, the youngsters would express their disappointment by asking, "when are we going to be with our Peace Corps?" (The title was synonomous with their particular friend.)

After eating lunch the children either would go outside to play or, in inclement weather, were allowed the use of the gym where they played lively games, (sometimes too lively) or some children would sit in corners and read stories to each other. The children, both older and younger, loved to work at the chalkboard. Many informal learning sessions developed in this way. The older child, as the potential teacher, loved to write at the board, and the younger ones would imitate and they found this another way of learning.

The children met once a week for an "activity" program. At this particular time the children worked on some kind of arts and crafts project together or they participated in "instant dramatics." If the older children were putting on a play for an assembly program, the younger children were included. For these activities the classes were divided, half of the older children going to the younger children's room, and then half the younger children going to the older children's room. The children have done some very nice work together and it was not always the older children who helped the younger ones in this effort. In one instance, the children were making pencil cases and purses. One Senior Peace Corpsman was having great difficulty with the purse and his younger buddy who was much better at this was able to show the older child how to proceed. For this youngster there was a great feeling of importance.

The children looked forward to their meetings and as one teacher put it, "the only time this class behaves itself is when their friends are coming to pick them up for their activity."

The older children were given some recognition for their part in the "Peace Corps" project by being taken to The City College to hear a speech given by Sargent Shriver, the former director of the U. S. Peace Corps. Mr. Shriver spoke to the City College seniors about joining U. S. Peace Corps. The children were called upon by Sargent Shriver to answer some questions. This was a very important day for them.

Observations on Teachers and Administration

In order to have the Project run smoothly, it was necessary to have the cooperation of the Principal, assistants, and those teachers involved directly, including aides in the lunchroom. The Principal was enthusiastic, excited and amenable to any schedules, changes or innovations. The Assistant to Principal in charge of the lunchroom raised difficulties in the sense that she found it "impossible" to schedule two of the classes at one time when space was so very limited. Yet, it had to be done. Crowded lunchrooms don't lend themselves to a gay, friendly, relaxed atmosphere; the aides were constantly reprimanding the children for talking, yet that was the purpose of the children eating together. The children would remind the aides that they were "Peace Corps" and that was a kind of password that would enable those particular children to be set aside and to do what the rest of the lunchroom was not privileged to do.

Supervision was requested by the administration and was necessary to maintain any semblance of order. Two or four classes of different age groups had to be supervised both in the lunchroom and for outside play. This was difficult to arrange because the teachers according to their union contract could not have their lunch hour interferred with and the supervisor hired by the Project had to leave for reasons of ill health. The teachers involved were prevailed upon to take up this duty and they were placed on the Project payroll. This solution worked extremely well until one teacher transferred to another school. There were many changes in classroom teachers because of promotions and transfers. When new people came in, they had to be oriented to the program and this was not always easy.

It was found from the beginning of the Project that the "teacher problem" proved most difficult. The children could be programmed and they easily responded and cooperated, but it was not so with the teachers. In this era of education, more is demanded of teachers than ever before and so, if there is a Project added to their other responsibilities, there is not going to be too much cooperation or enthusiasm. Only when the teachers were offered payment for their efforts, was there any breakthrough. This, of course, was a drawback because the teachers could not always be promised payment for their efforts. This problem has to be solved by a willingness of the administration to schedule "time" for this particular activity.

Even though great enthusiasm for the ideas of the "Peace Corps" came through at time, it was difficult to maintain this attitude throughout because of the extra burden the teachers thought they were carrying. They had to be pampered, flattered, given promises, assistance in planning and being pushed all the way. This attitude of negativism can not be hidden from the children and they in turn voiced their complaints. It was easier to explain problems and placate the children than it was to have the teachers show some feeling of responsibility and interest.

Teachers who are enthusiastic, dedicated, and creative are needed in an effort of this kind but, these requirements seem to be so high that it is difficult to find the people to meet them. If this Project were to continue, the administration would have to take an active part in assigning and scheduling enough time so that the teachers involved would not consider the job an extra one and would have enough time and interest to plan accordingly.

It is a pity that such a promising "idea" to help disadvantaged children should be bogged down by problems of administration which can smother and almost destroy the real purposes.

Perhaps the "Peace Corps" program has not resulted in any great academic achievements but there are other positive values that should be assessed. As in the U. S. Peace Corps, no one volunteer can say he or she has changed the face of the country he is working in, but each can say he has been able to influence some number of individuals. So it is with this "Peace Corps" program. My aim subjective impression is that the children have been made more conscious of themselves, of their worth, of the importance of learning; the meaning of friendship. The psychological developments and influences made on these children will be remembered for a long time to come and perhaps in some way have some direct meaning for their future.